Studies on the Macrobenthos of the Southern Ocean

A thesis
submitted for the Degree
of
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by
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To Al Costlow and Jeff McComas

PREFACE

The following thesis is written in five parts. These include a diversity paper, a zoogeography paper, two taxonomy papers, and a catalogue. Although each paper is a separate entity, they are all inherently related. The foundation of the thesis is a series of collections made between southern New Zealand and McMurdo Sound, Antarctica, intermittently from December 1970 to February 1973. They have formed the basis of the diversity study and raised the questions on which the rest of the thesis depends. Sorting, identifying and counting the animals in the collections has been a long slow job, broken up by other shorter studies presented here and elsewhere.

The zoogeography study was undertaken to gain a better understanding of the origin and present day distribution of Antarctic Amphipoda and Polychaeta, the two main groups in the diversity study. Much of this work consisted of searching the literature and compiling distribution records which were sorted by the computer into areal checklists. The mechanics for this line of research are now worked out and I hope to continue it for other Antarctic invertebrate groups with the objective of looking for large scale zoogeographic trends. As the zoogeography study progressed it became apparent that the literature on Southern Ocean amphipods was badly in need of unification. Since I had most of the literature at my fingertips, and since I had to determine synonymies and distributions for the zoogeography study I decided to formalize this information into a catalogue, which was subsequently done with the help of Miss Suzanne Bullock. The catalogue was compiled on a computer and is very easy to update as new information becomes available. This makes it a continuous record of published information on Southern Ocean Amphipoda.

The two amphipod taxonomy papers came directly from the collections for the diversity study. Unfortunately they describe only a small proportion of the new species in the collections. I anticipate describing more of these species at a later date, along with other new amphipod species collected by Dr Horning and me, particularly in the New Zealand Subantarctic. As for the other kinds of invertebrates in the collections, some are already being studied by specialists or have been given to museums, and this is the eventual fate of the entire collection.

James K. Lowry
Christchurch
January 1976

Studies on the Macrobenthos
of the Southern Ocean

Studies on the Macrobenthos
of the Southern Ocean. 1.
Marine Benthic Diversity
along a Latitudinal Gradient.

Sampling in Moubray Bay, Cape Hallett,
from the U.S.C.G.C. *Northwind*

It is fascinating to contemplate the possibilities inherent in stable environments existing in rather cold temperatures...In a system at high temperatures a higher amount of entropy is produced in the exchange of a fixed amount of energy. In consequence, a system at high temperature cannot go as far (cannot reach the same degree of maturity) as an equivalent system at a lower temperature ...Nevertheless, it happens that at the present time the most stable environments are found in the tropics.

Ramón Margalef
1968

ABSTRACT

Four hundred and sixty-nine species and 61 559 individuals were collected from six stations along a latitudinal transect between southern New Zealand, 47°S, and McMurdo Sound, 77°S, Ross Sea. Dominant species based on abundance and frequency of occurrence are discussed for each sampled community. Based on the numerical percentage of suspension-feeding and deposit-feeding individuals, the basic trophic structure of each community is determined. Two stations have mixed suspension, deposit-feeding communities, two have deposit-feeding communities, and two have suspension-feeding communities. The species diversity statistics, heterogeneity, richness, and equitability are determined for each community. These statistics show no correlation between species diversity of the sampled macrobenthos and latitude, indicating that macrobenthic diversity does not change with latitude along the transect. However, there is good correlation between species diversity of the sampled macrobenthos and trophic structure of the communities. The relationship indicates that mixed suspension, deposit-feeding communities are more diverse than deposit-feeding communities which, in turn, are more diverse than suspension-feeding communities.

Along the latitudinal transect polychaetes, peracarids, and bivalves are always the dominant macrobenthic groups. But, while polychaete species and numbers remain relatively constant with latitude, bivalves decrease with increasing latitude and peracarids increase. The decrease in bivalve importance on the Antarctic shelf is attributed to low temperatures, which affect larval reproduction, and the shallow calcium carbonate compensation depth which affects shell construction and maintenance. Peracarids and polychaetes are apparently not affected by these parameters, and have effectively replaced bivalves on the Antarctic shelf.

Heterogeneity of the soft bottom macrobenthos from other sampled parts of the world oceans is similar to the Southern Ocean macrobenthos, except the North Atlantic shelves and the Arctic deep sea which are lower. This similarity is believed to be the result of stable environmental conditions over a long period of time whereas lower heterogeneity on the North Atlantic shelves and in the Arctic deep sea is thought to be the result of past and present unstable

environment and low energy input respectively.

The deep sea (except in the Arctic) and the Antarctic shelf have similar heterogeneity and similar percentage species composition of polychaetes, peracarids, and bivalves, which is considered to be characteristic of marine cold water faunas.

CONTENTS

INTRODUCTION

PREVIOUS STUDIES

Changes in numbers of species along latitudinal gradients have long been recognized (Wallace, 1878), but only recently have they come under critical examination (Darlington, 1957; Fisher, 1960; Pianka, 1966; Sanders, 1968). Examples of work on terrestrial gradients include Dobzhansky (1950), Kusenov (1957), Simpson (1964), and MacArthur (1965). In the marine environment studies involving latitudinal gradients and species diversity include Hartmeyer (1911), Thorson (1952, 1957), Wells (1955), Fisher (1960), Stehli, McAlester and Helsley (1967), Sanders (1968), and Johnson (1970). Stehli (1968) wrote a very interesting paper which used terrestrial and marine diversity gradients to test the hypotheses of continental drift and polar wandering. In general these studies have established that there are more species toward the tropics than in temperate or polar latitudes, and that species living in the tropics maintain smaller populations than species living in temperate or polar climes.

There has been a large number of theoretical explanations for latitudinal changes in species diversity, and much of this work has been reviewed by Pianka (1966). He summarized six distinct hypotheses concerning changes in species diversity with latitude; the time hypothesis (Fisher, 1960; Simpson, 1964), the competition hypothesis (Dobzhansky, 1950; Williams, 1964), the climatic stability hypothesis (Klopfer, 1959; Fisher, 1960; Dunbar, 1960), and the productivity hypothesis (Connell and Orias, 1964). Paine (1966) proposed a theory based on predation.

The theories of Margalef (1963) and Sanders (1968) have become particularly relevant to understanding diversity of extant marine communities, and also in interpreting fossil evidence (Shaak, 1975). Margalef and Sanders believed that community succession proceeds on a sliding scale from a pioneer or predominantly physically controlled community to a mature or predominantly biologically controlled community. Succession proceeds with time in a stable environment. At any stage physical or biological disturbances can slow down or even set back the process, but as the system becomes more mature external disturbances have less effect.

Woodin (1974) has recently shown, in a quantitative manner, the importance of biological interaction in a physically controlled community as defined by Sanders (1968, 1969).

In his recent book, *Marine Zoogeography,* Briggs (1974) argued his concept of latitudinal species diversity as a step-wise progression correlated with major zoogeographic boundaries. Each step from the tropics to the poles takes the ecosystem further from a biologically controlled system, and closer to one that is physically controlled. However, this type of argument may not be relevant to the marine soft bottom benthos because it is a buffered environment where changes are very gradual. Briggs discussed geographic size as an important factor controlling numbers of species in the marine environment. He supported this argument by referring to the good correlation between numbers of species and geographic area on isolated oceanic islands as documented by MacArthur and Wilson (1963, 1967), and Johnson, Mason and Raven (1968).

Of particular relevance to the present study is the work of Gunnar Thorson and Howard Sanders. Thorson (1957), reflecting on his earlier work (1952), stated that while the number of epifaunal species increased significantly from the North Polar Ocean to the tropics the number of infaunal species remained relatively constant. To illustrate this point he plotted various groups of epifaunal and infaunal invertebrates against latitude. Sanders (1968) used bivalves and polychaetes, which normally made up at least 80% of his benthic samples from the North Atlantic and Indian Oceans to show that the numbers of infaunal species increased substantially toward the tropics. Thorson (1957) and Sanders (1968) have thus come to different conclusions concerning changes in the diversity of infaunal species with latitude. This has created a quandary as to whether the established generality mentioned earlier, which states that tropical ecosystems contain more species with smaller populations than polar ecosystems, actually applies to the marine benthos.

OBJECTIVES OF THIS STUDY

This study investigates the diversity of the shallow water benthos between southern New Zealand and the Antarctic seas.

The main objectives are: 1. to determine if diversity of the soft bottom macrobenthos, as defined by the methods of Shannon (1948), Margalef (1958), and Pielou (1967), varies along this gradient; 2. to divide each macrobenthic community into its major component parts to determine if specific groups are changing along the gradient; 3. to describe and classify each community by its numerically dominant species and by its basic trophic structure; 4. to compare the diversity of the communities in this study with studies from other parts of the world.

Throughout the study I have used the term community to describe the macrobenthic samples from each area. The term as used here follows the concept of Mills (1969) which stated that a community is "a group of organisms occurring in a particular environment, presumably interacting with each other and with the environment, and separable by means of ecological survey from other groups". I have also used the name "Southern Ocean" in preference to other names in the literature, such as the "Antarctic Ocean". The name is used here to refer to the body of water bounded at its southern margin by the Antarctic continent and at its northern margin by the Antarctic convergence. Hedgpeth (1969) has discussed the derivation and meaning of this terminology.

ENVIRONMENT

STUDY AREA

The study area (figure 1) was a transect from 47°S to 77°S latitude and 165°E to 170°E longitude, except one station at 64°W. The stations along the transect were confined to continental shelves between 11 m and 250 m depth. Three stations were sampled on the Campbell Plateau south of New Zealand, one station was sampled on the Antarctic Peninsula, and two stations were sampled along the Victoria Land Coast in the Ross Sea. From these stations I collected 469 species and 61,559 individuals (see Appendix I for species list).

Campbell Plateau

Station PP 1-4: North Arm, Port Pegasus, Stewart Island, New Zealand; 47°10'S, 167°41'E; 42 m to 43 m depth, (figures 2, 3). This is the northernmost set of samples which were collected on 23 March 1972 in a howling NW gale from the R.V. *Acheron*. The protected nature of the port resulted in relatively calm water and allowed the sampling to be accomplished without undue problems.

Station AI 3-4: Sandy Bay, Port Ross, Auckland Islands, New Zealand; 50°30'S, 166°16'E; 11 m to 14.6 m depth, (figures 2, 4). These samples were taken from the R.V. *Acheron* on 14 February 1973 while anchored off Enderby Island. The evening was fine and calm and no trouble was experienced in making the collections. AI 1-2: Waterfall Inlet, Auckland Islands, New Zealand; 50°49'S, 166°16'E; 13 m to 14.6 m depth, (figures 2, 5). These samples were also taken from the R.V. *Acheron* on 12 February 1973. The ship was stationed just outside the inlet on a strong ebbing tide.

Station PH 1-5: Perseverance Harbour, Campbell Island, New Zealand; 52°33'S, 169°10'E; 14 m to 60 m depth, (figures 2, 6). This set of samples was made on two occasions, 12 and 25 February 1971 from the H.M.N.Z.S. *Endeavour*. The narrowness of the harbour made collecting difficult and the samples from the head of the harbour were taken with some effort from one of the landing boats. On both occasions the sea was calm with little wind.

Antarctic Peninsula

Station AH 1-4: Arthur Harbour, Anvers Island, Antarctica; 64°48'S, 64°06'W; 26 m to 40 m depth, (figures 7, 8). These samples were collected during the summer seasons of 1967 and 1968 from small dinghies. Lowry (1975) has given a complete description of the area.

Victoria Land Coast

Station CH 1-4: Moubray Bay, Cape Hallett, Antarctica; 72°18'S, 170°12'E; 104 m to 250 m depth, (figures 9, 10). These samples were collected on 17 and 18 January 1972 from the U.S.C.G.C. *Northwind* during a continuous 18 hour sampling period. In order to collect the samples a transect was cut through the ice, and clear water for the grab was made by wagging the stern of the ship. Samples were difficult to collect because of gravel in the sediment which often became lodged in the jaws of the grab.

Station CB 1-4: McMurdo Sound, Cape Bird, Ross Island, Antarctica; 77°13'S, 166°26'E; 35 m to 54 m depth, (figures 9, 11). These samples were taken from the small trimaran R.V. *Clione* on 25, 28 December 1970 and 4, 11 January 1971. Samples were collected on calm days when little pack ice was in the area although the strong southerly flowing current off Cape Bird made sampling somewhat difficult.

LATITUDINAL GRADIENT

Temperature

The latitudinal gradient forms a transect of approximately 2900 km between Port Pegasus and McMurdo Sound along a longitude of about 170°E except Arthur Harbour at 64°W. The physical parameter most easily measured is temperature. The summer temperature range is about 18°C along the gradient, from 16°C in southern New Zealand (C. Hay, University of Canterbury, pers. comm., 1975) to -1.9°C in McMurdo Sound (Littlepage, 1965). This is not considered a wide temperature gradient over such a long transect, for as Dunbar (1968) pointed out it is not low temperature that dictates a harsh

Figure 1. Study area, showing stations along the latitudinal transect.

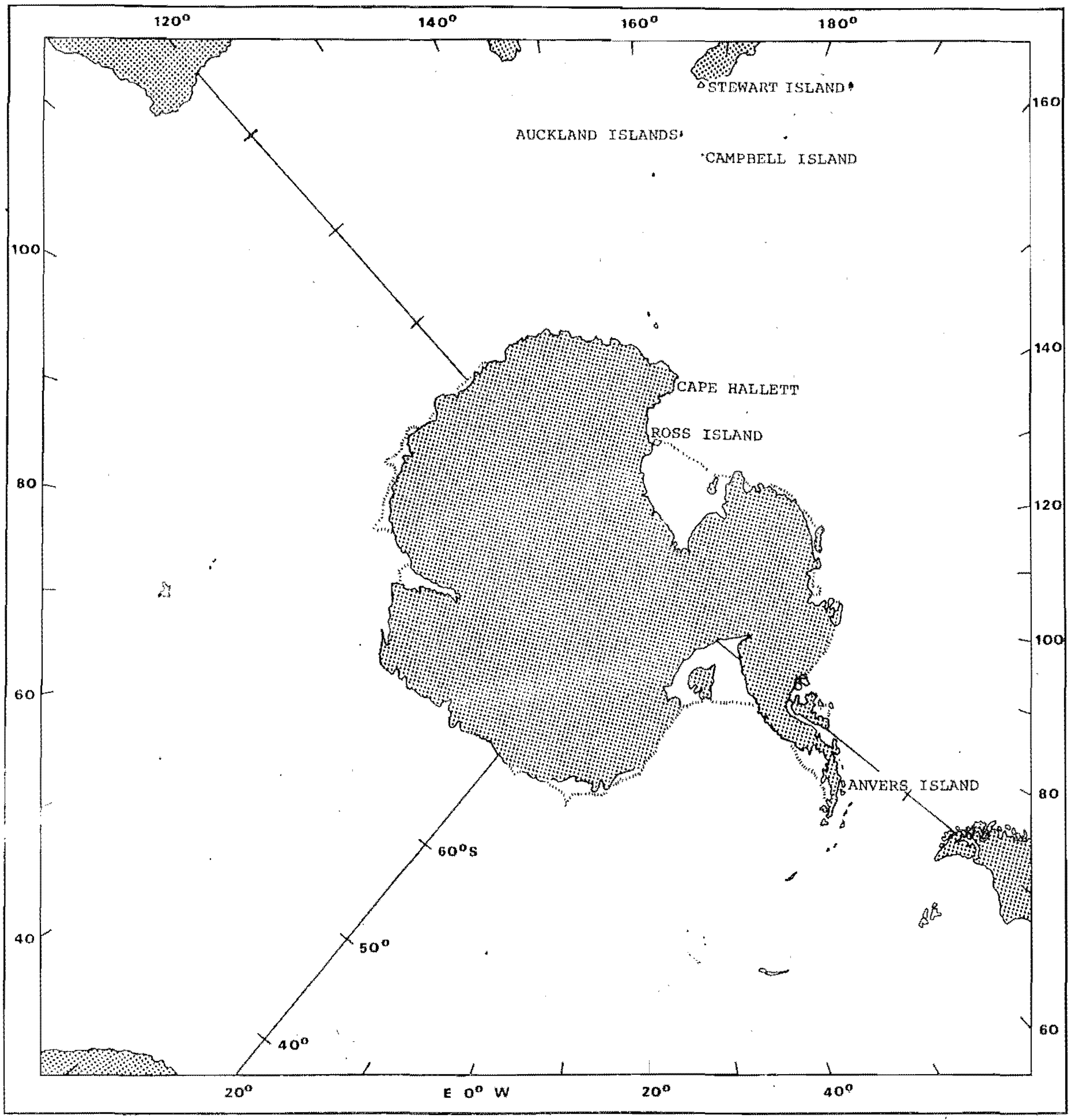

120°
140°
160°
180°
STEWART ISLAND
AUCKLAND ISLANDS
CAMPBELL ISLAND
160
100
140
CAPE HALLETT
ROSS ISLAND
80
120
100
60
ANVERS ISLAND
80
60°S
40
50°
60
40°
20°
E 0° W
20°
40°

Figure 2. Campbell Plateau, showing the New Zealand Subantar stations.

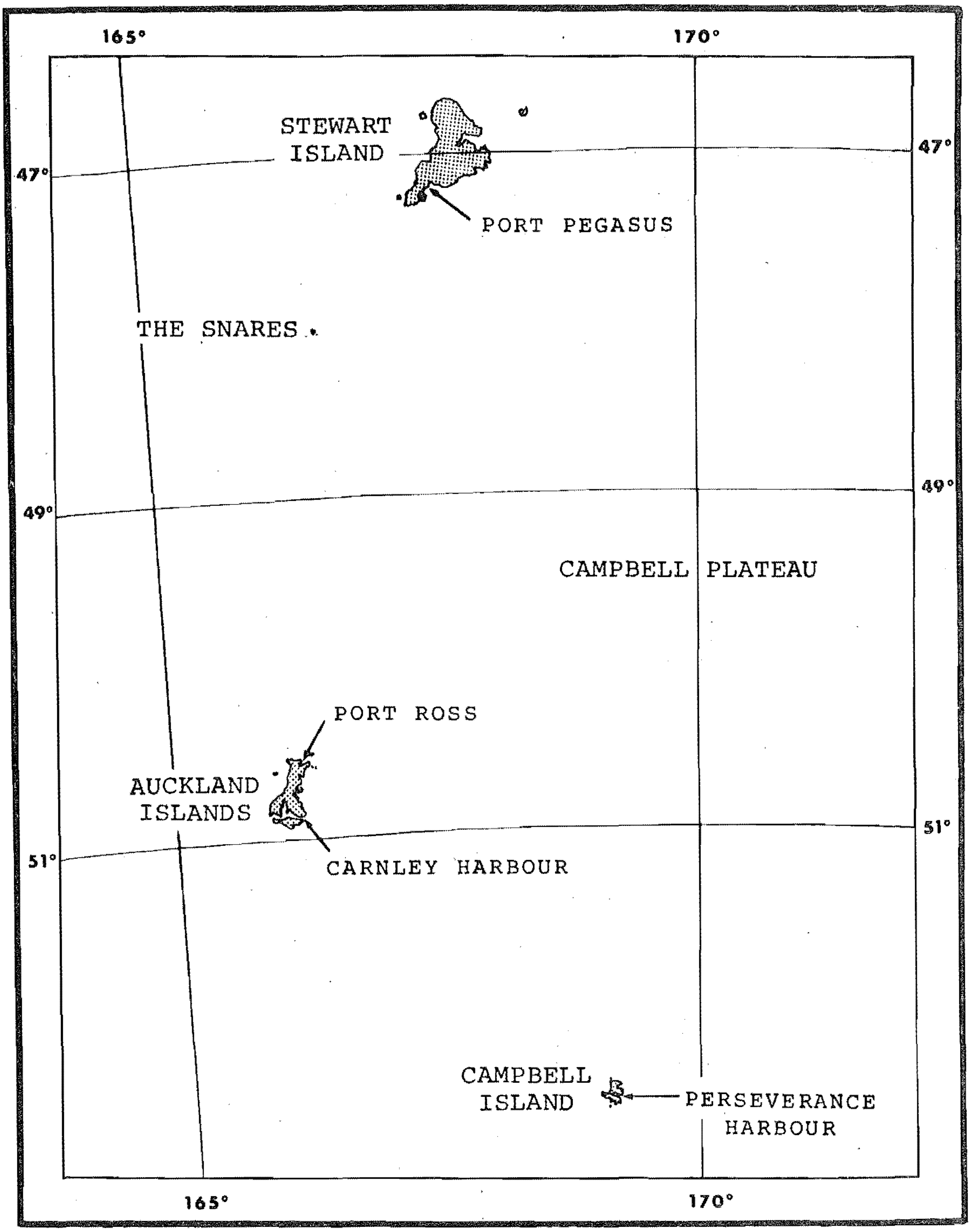

165°
170°
47°
47°
STEWART
ISLAND
PORT PEGASUS
THE SNARES
49°
49°
CAMPBELL PLATEAU
PORT ROSS
AUCKLAND
ISLANDS
51°
51°
CARNLEY HARBOUR
CAMPBELL
ISLAND
PERSEVERANCE
HARBOUR
165°
170°

Figure 3.	North Arm, Port Pegasus, Stewart Island, showing location of samples PP 1, 42 m; PP 2, 42 m; PP 3, 42 m; PP 4, 43 m.

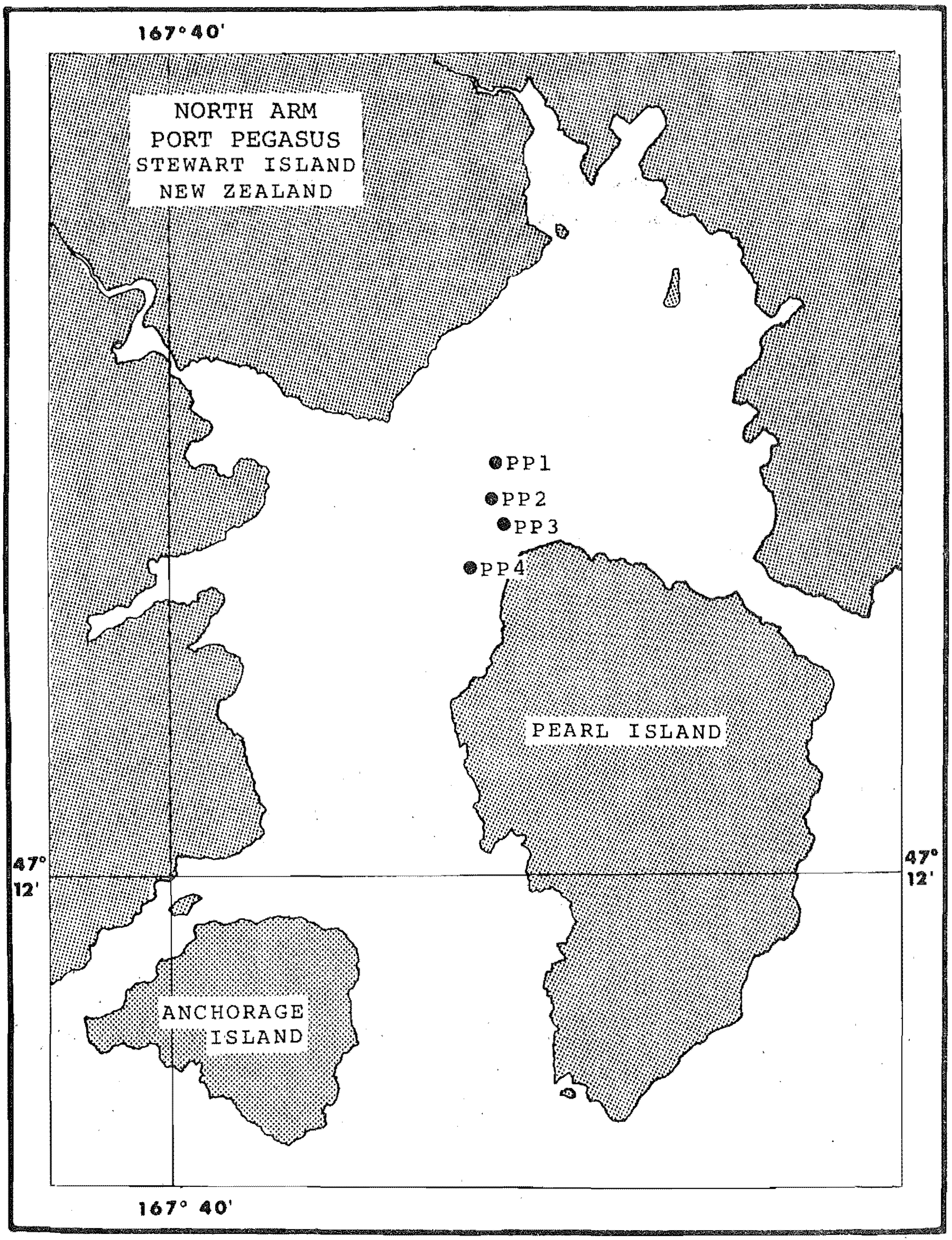
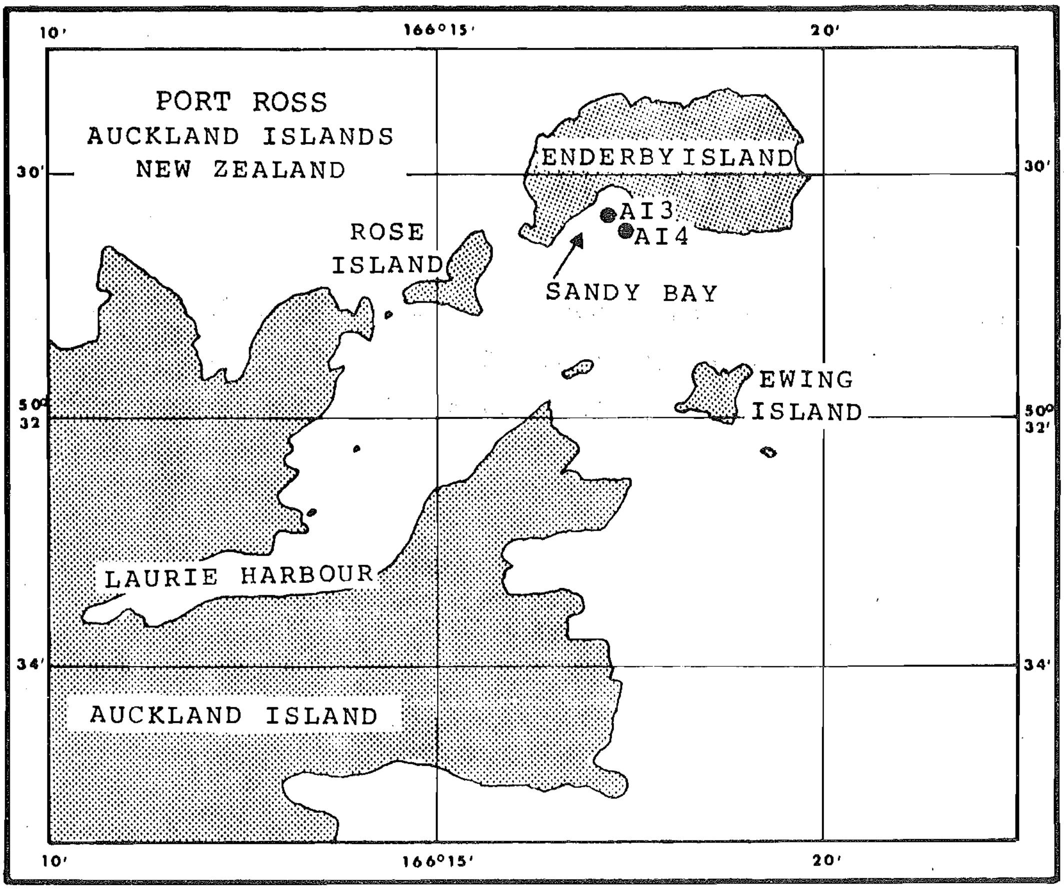

167°40'
NORTH ARM
PORT PEGASUS
STEWART ISLAND
NEW ZEALAND
PP1
PP2
PP3
PP4
PEARL ISLAND
47°
12'
47°
12'
ANCHORAGE
ISLAND
167° 40'

Figure 4. Sandy Bay, Port Ross, Auckland Islands, showing location of samples AI 3, 11 m; AI 4, 14.6 m.

Figure 5. Waterfall Inlet, Auckland Islands, showing location of samples AI 1, 13 m; AI 2, 14.6 m.


10'
166°15'
20'
PORT ROSS
AUCKLAND ISLANDS
NEW ZEALAND
30'
ENDERBY ISLAND
AI3
AI4
ROSE
ISLAND
SANDY BAY
EWING
ISLAND
50°
32'
LAURIE HARBOUR
34'
AUCKLAND ISLAND

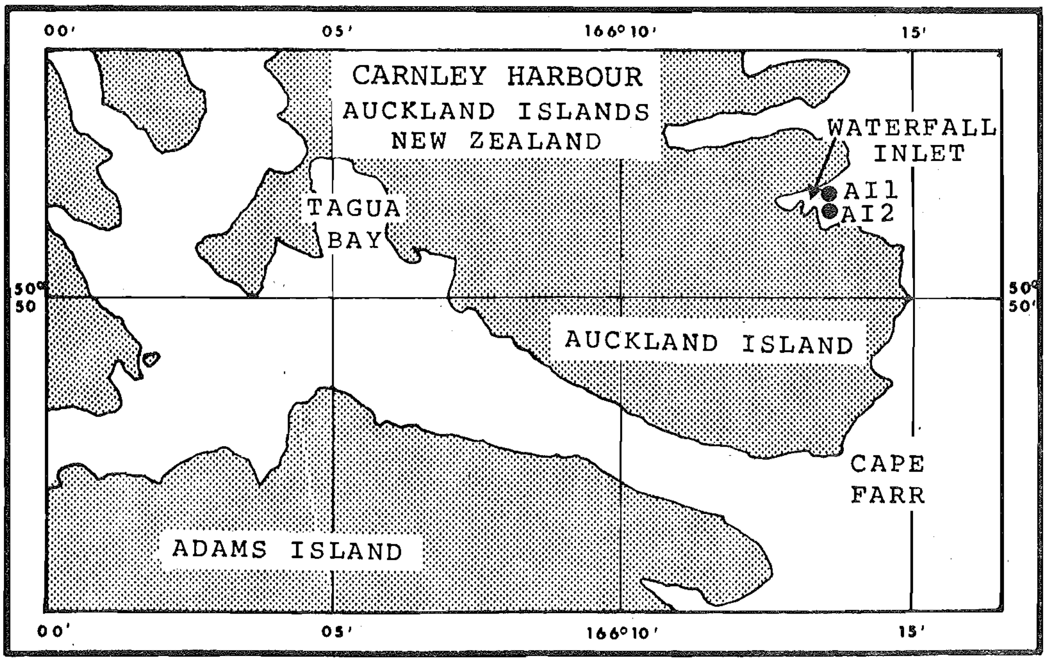

00'
05'
166°10'
15'
CARNLEY HARBOUR
AUCKLAND ISLANDS
NEW ZEALAND
WATERFALL
INLET
AI1
AI2
TAGUA
BAY
50°
50'
AUCKLAND ISLAND
CAPE
FARR
ADAMS ISLAND

Figure 6. Perseverance Harbour, Campbell Island, showing location of samples PH 1, 60 m; PH 2, 43 m; PH 3, 40 m; PH 4, 22 m; PH 5, 18 m.

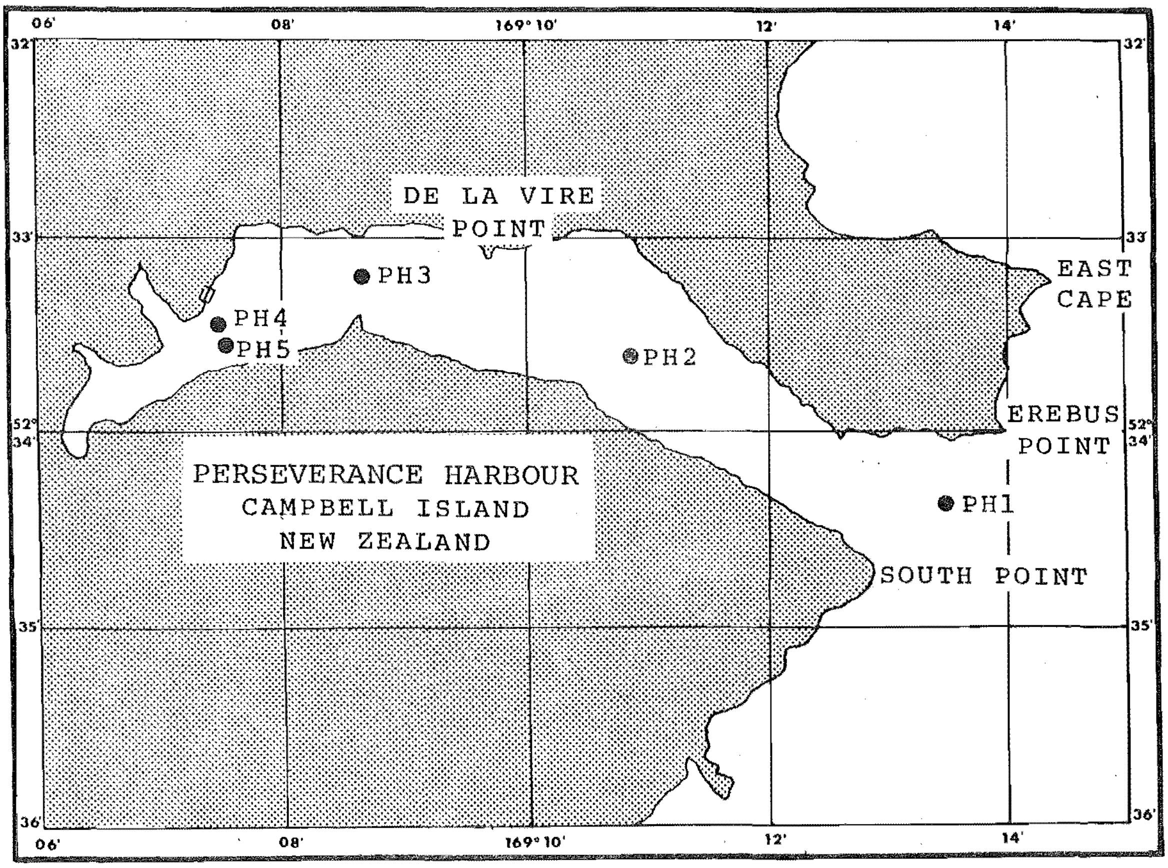

06'
08'
169° 10'
12'
14'
32'
33'
52° 34'
35'
36'
DE LA VIRE POINT
PH3
PH4
PH5
PH2
EAST CAPE
EREBUS POINT
PH1
SOUTH POINT
PERSEVERANCE HARBOUR
CAMPBELL ISLAND
NEW ZEALAND

Figure 7. Antarctic Peninsula, showing Arthur H
Island, Antarctica (after Lowry, 197

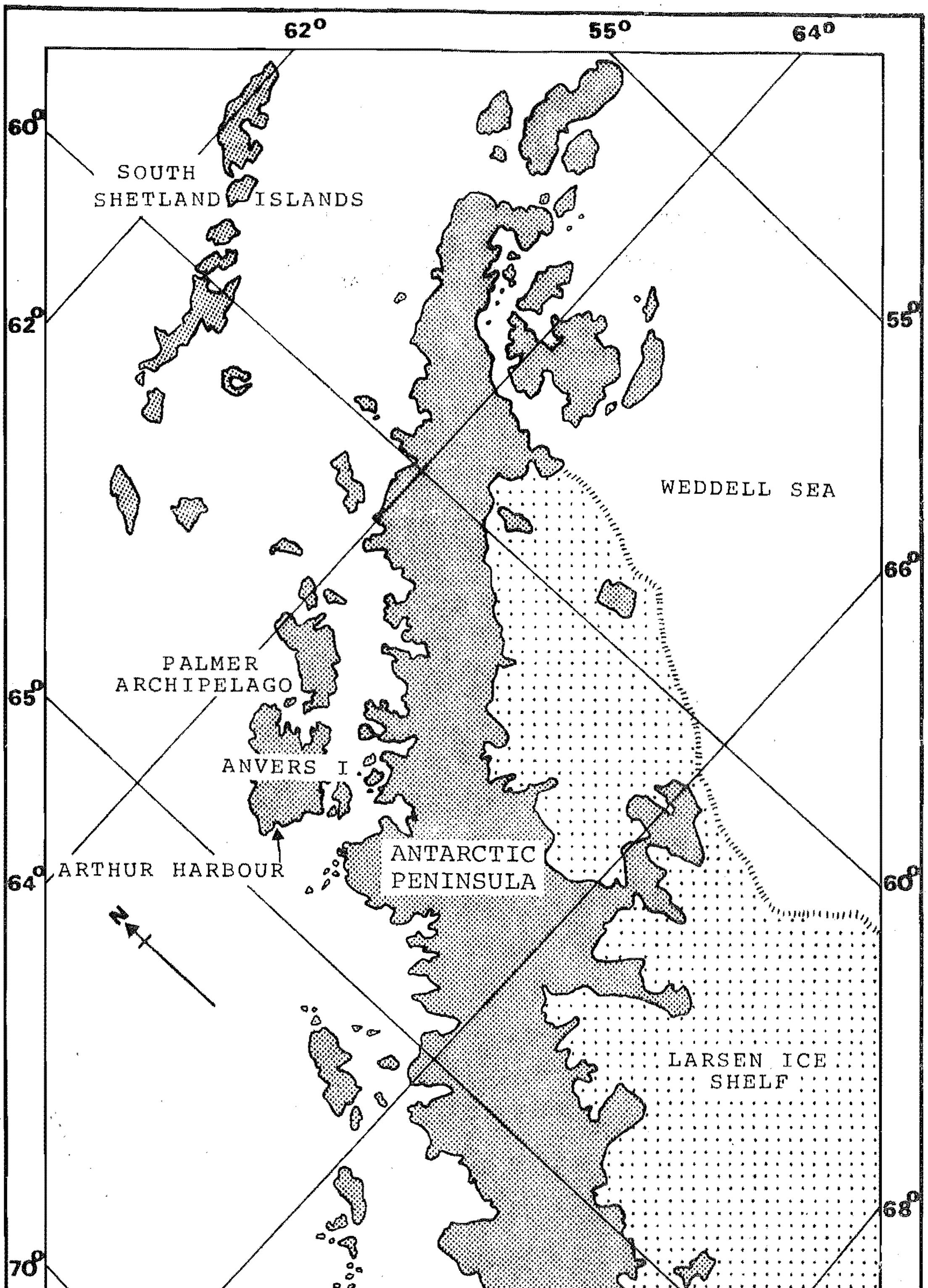

62°
55°
64°
60°
SOUTH
SHETLAND ISLANDS
62°
55°
WEDDELL SEA
66°
PALMER
ARCHIPELAGO
65°
ANVERS I.
ANTARCTIC
PENINSULA
64°
ARTHUR HARBOUR
60°
N
LARSEN ICE
SHELF
68°
70°
70°
66°
65°
68°

Figure 8. Arthur Harbour, Anvers Island, showing location of samples AH 1, 2, 32 m; AH 3, 4, 35 m.

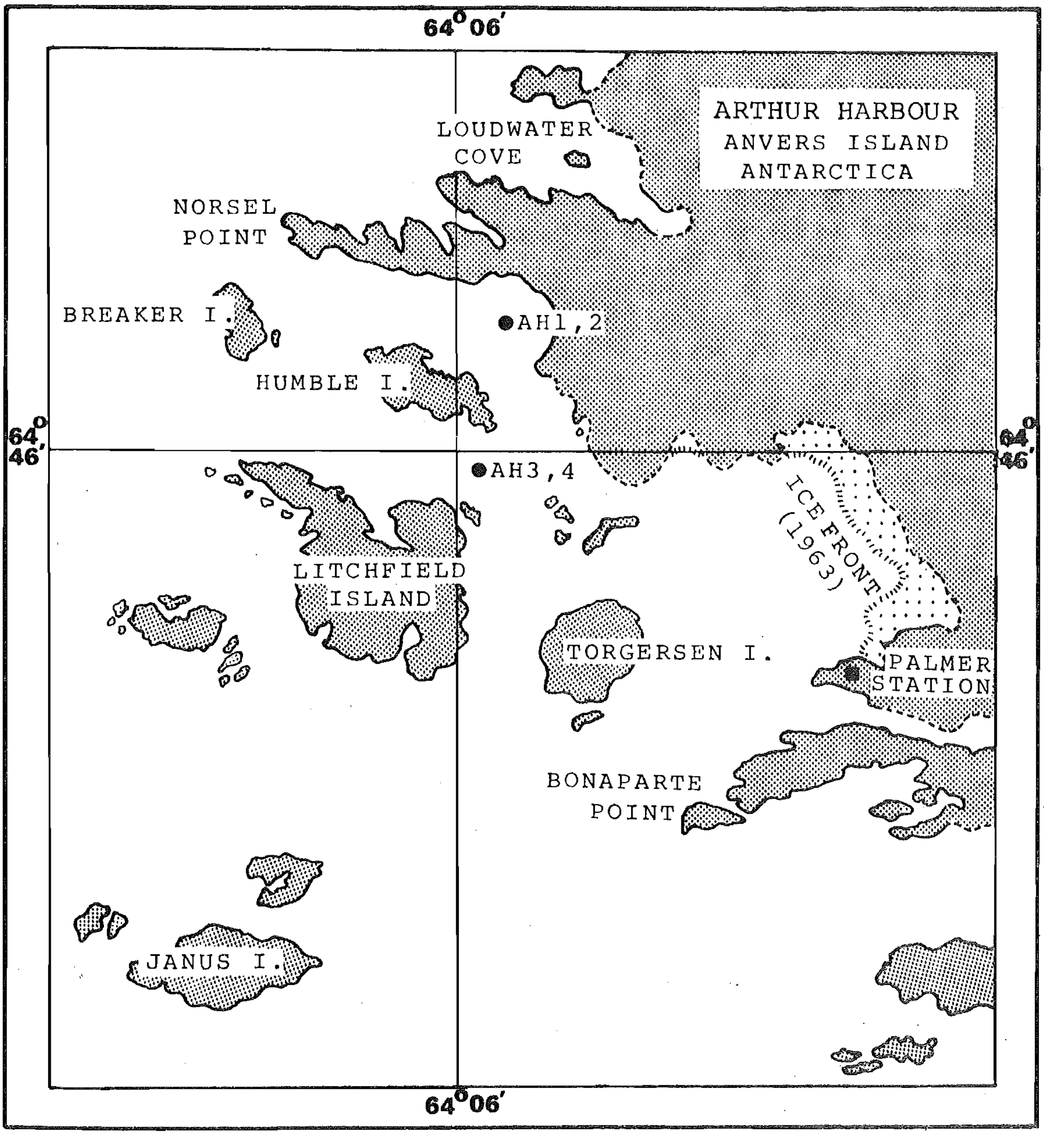

64°06'
ARTHUR HARBOUR
ANVERS ISLAND
ANTARCTICA
LOUDWATER
COVE
NORSEL
POINT
BREAKER I.
AH1,2
HUMBLE I.
64°
46'
AH3,4
ICE FRONT
(1963)
LITCHFIELD
ISLAND
TORGERSEN I.
PALMER
STATION
BONAPARTE
POINT
JANUS I.
64°06'

Figure 9. Victoria Land Coast, showing the Ross Sea stations.

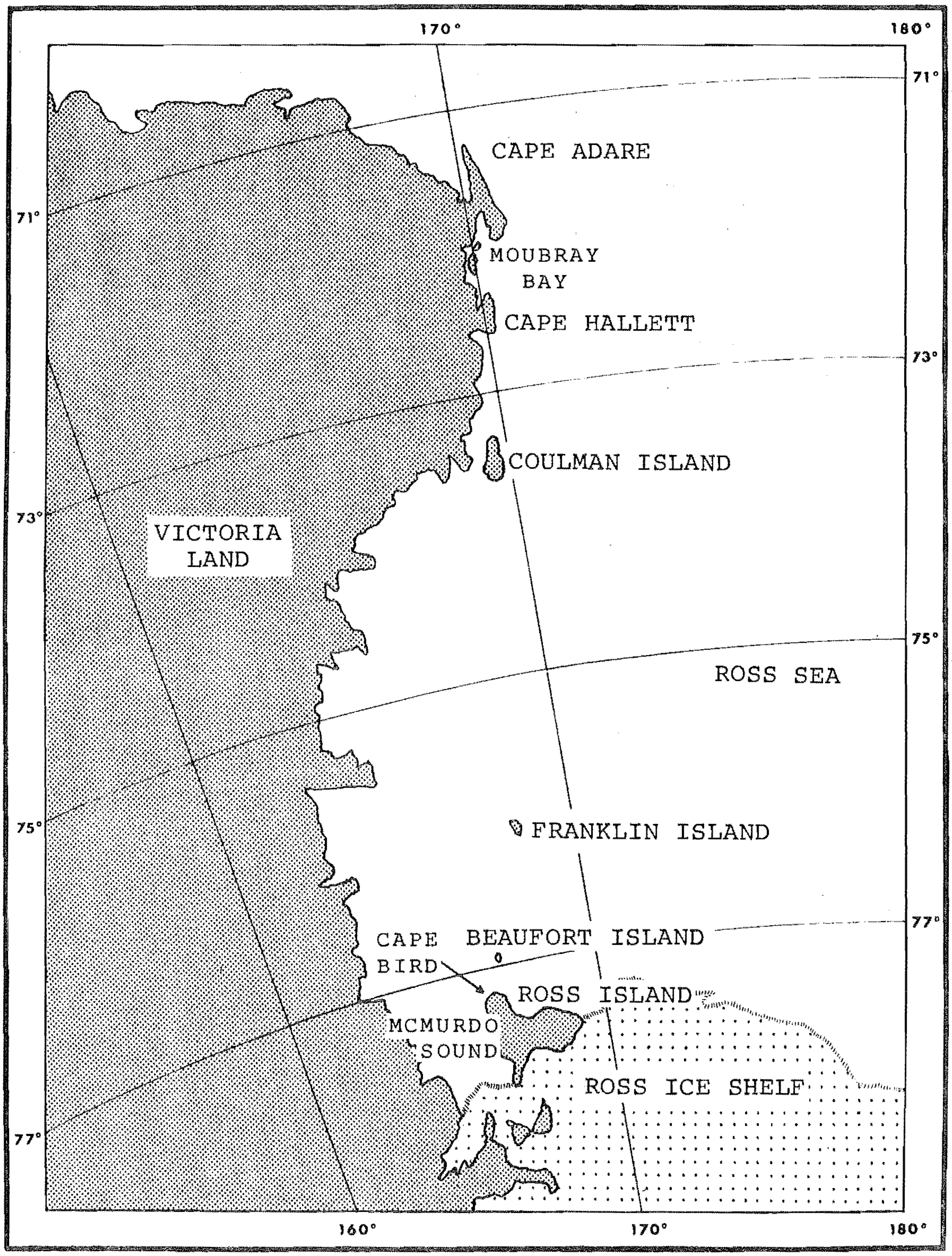

170°
180°
71°
CAPE ADARE
71°
MOUBRAY
BAY
CAPE HALLETT
73°
COULMAN ISLAND
73°
VICTORIA
LAND
75°
ROSS SEA
75°
FRANKLIN ISLAND
77°
CAPE
BIRD
BEAUFORT ISLAND
ROSS ISLAND
MCMURDO
SOUND
ROSS ICE SHELF
77°
160°
170°
180°

Figure 10. Moubray Bay, Cape Hallett, showing location of samples CH 1, 104 m; CH 2, 134 m; CH 3, 208 m; CH 4, 250 m.

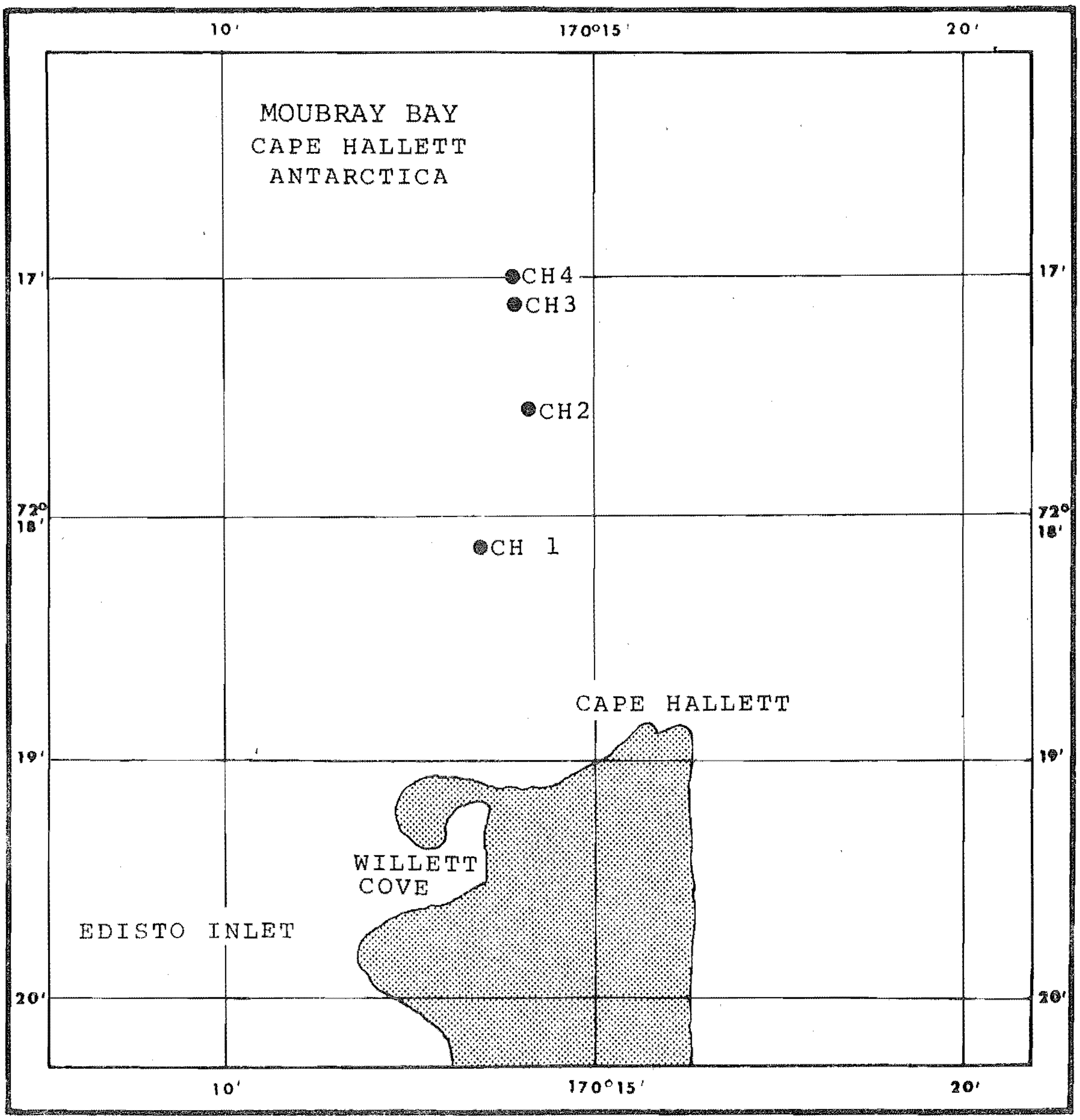
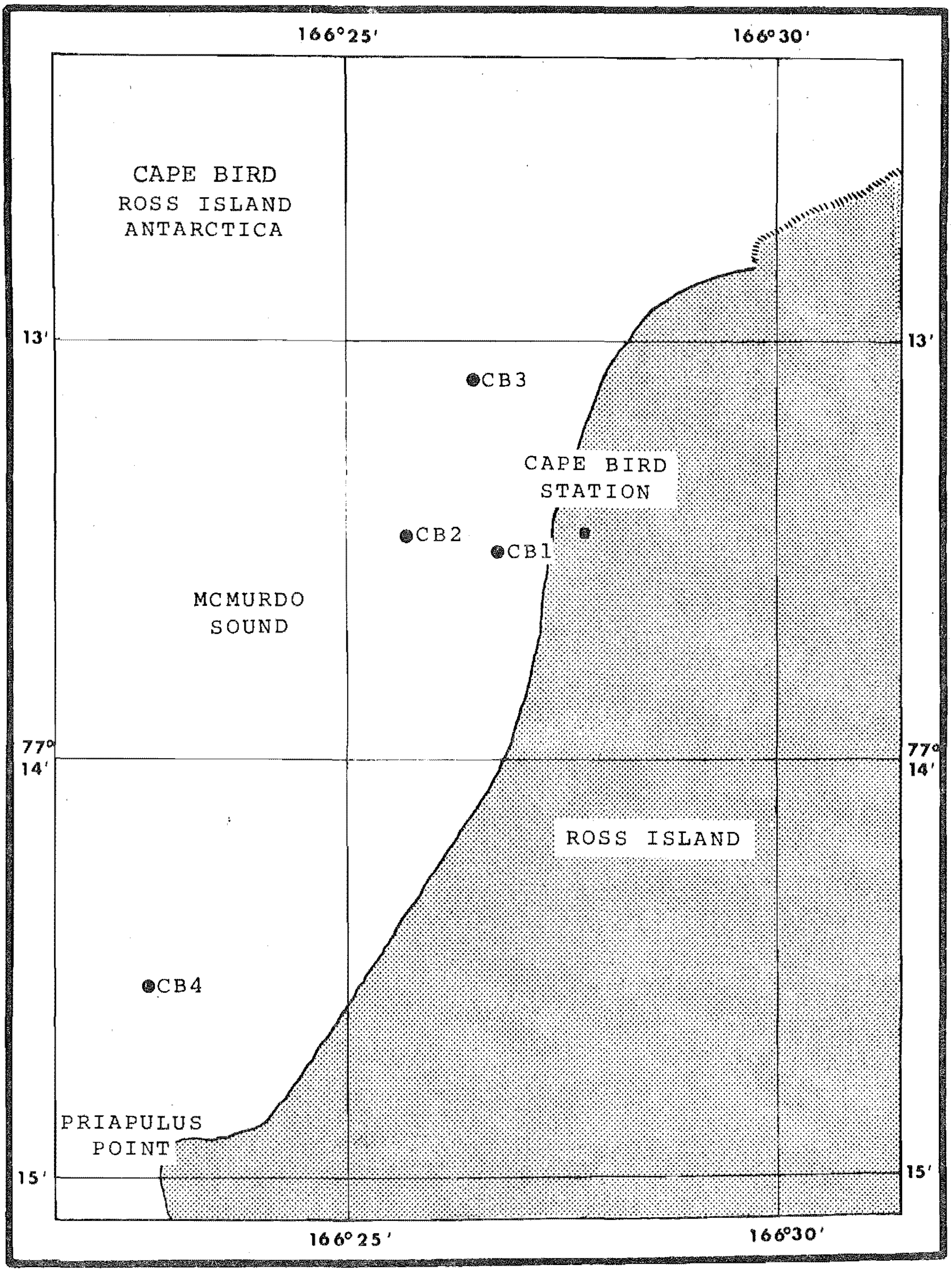

10'
170°15'
20'
MOUBRAY BAY
CAPE HALLETT
ANTARCTICA
17'
CH4
CH3
CH2
72° 18'
CH 1
CAPE HALLETT
19'
WILLETT COVE
EDISTO INLET
20'

Figure 11. McMurdo Sound, Cape Bird, Ross Island, show
location of samples CB 1, 35 m; CB 2, 65 m
CB 3, 54 m; CB 4, 50 m.


166°25'
166°30'
CAPE BIRD
ROSS ISLAND
ANTARCTICA
13'
13'
CB3
CAPE BIRD
STATION
CB2
CB1
MCMURDO
SOUND
77°
14'
77°
14'
ROSS ISLAND
CB4
PRIAPULUS
POINT
15'
15'
166°25'
166°30'

environment, but the range of temperature over a given period of time that is important. Annual temperature ranges in the shallow water along the transect are shown in figure 12, and the stability of the environment with respect to temperature is considered below.

Littlepage (1965) found that the annual temperature range in McMurdo Sound was only 0.6°C. In Arthur Harbour it has increased to slightly over 2°C (Lowry, 1975). Means from 25 years of sea surface temperature data from Perseverance Harbour indicate an annual range of 3.4°C (E. Farkas, New Zealand Meteorological Service, pers. comm., 1975). The annual range at Tautuku Peninsula in southern New Zealand is 8°C (C. Hay, University of Canterbury, pers. comm., 1975). Consequently annual temperature ranges increase with decreasing latitude between McMurdo Sound and southern New Zealand. However these ranges are considered moderate when compared with the 30°C range along the shallow shelf of the western North Atlantic (Sanders, 1958; Boesch, 1972), and reflect the stability of the environment along the transect.

Salinity and Oxygen

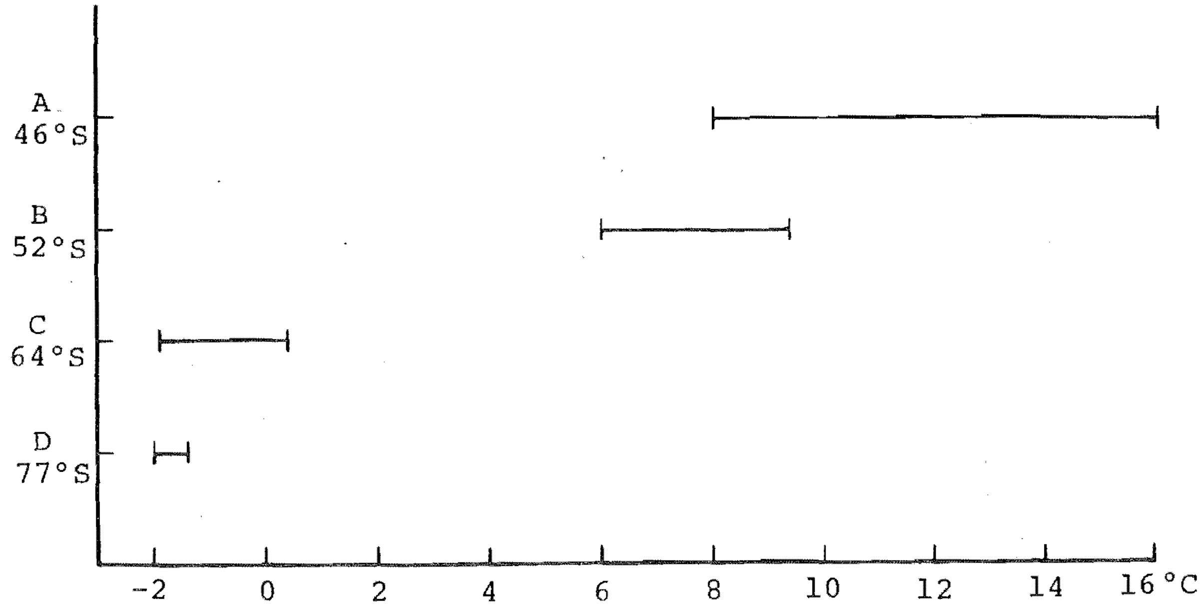
The waters on the Campbell Plateau are mainly Australasian Subantarctic surface waters with a salinity between 34.60‰ and 34.70‰ according to Houtman (1967). Salinity in Arthur Harbour varied from 33.68‰ to 34.62‰ (Lowry, 1975). In McMurdo Sound, Littlepage (1965) reported a salinity range from 33.96‰ to 34.92‰. He found stable oxygen levels in McMurdo Sound between 75% and 105% saturation throughout the year. Bogoyavlenskiy (1966) showed high oxygen values all along 170°E longitude.

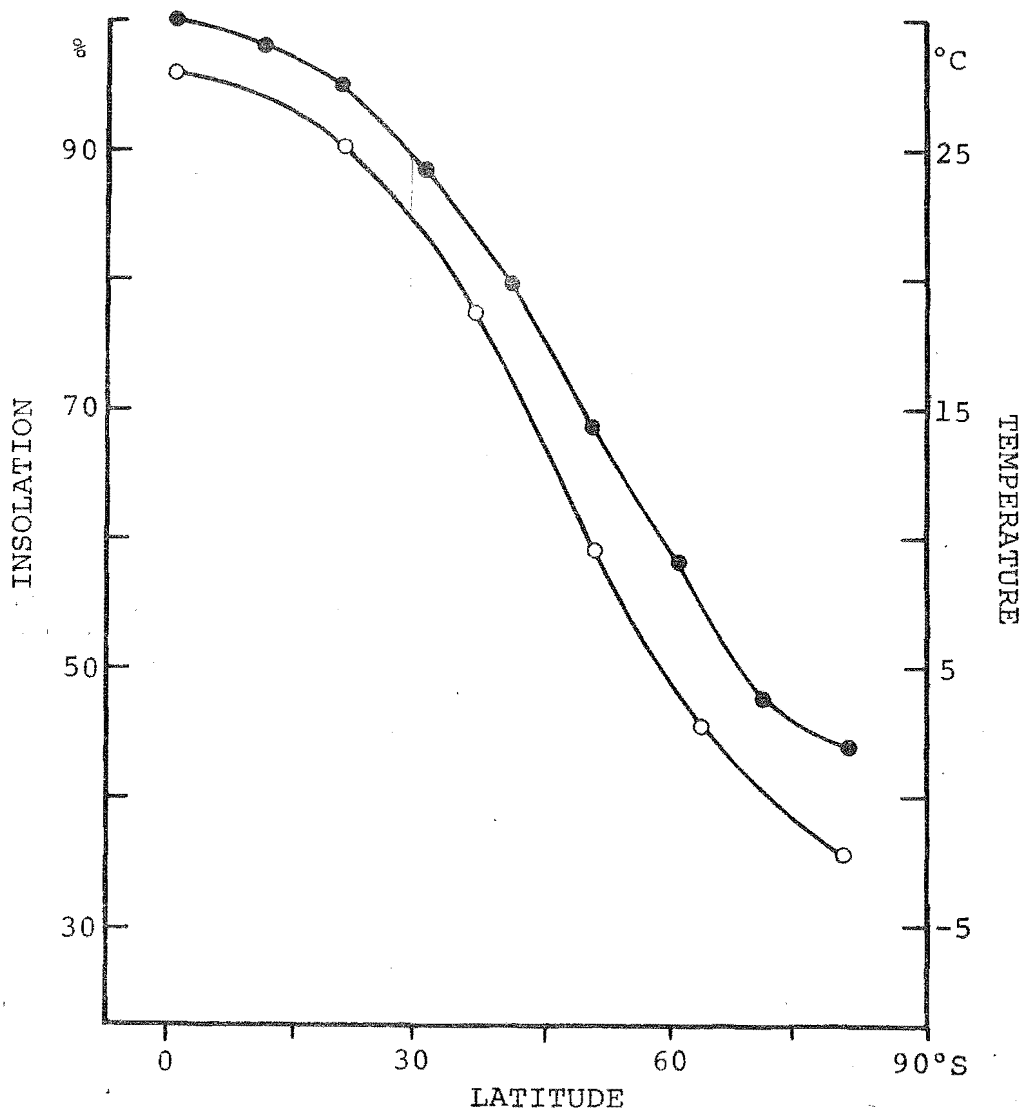
Insolation and Primary Productivity

The main physical variables along the gradient which might affect the shallow water macrobenthos are temperature and light. Stehli (1968) plotted a solar capture gradient and a planetary temperature gradient (figure 13) for ocean surface waters, which illustrates how these parameters change from the equator to the poles. The figure indicates that surface plankton on the Antarctic shelf will receive only half the amount of solar energy as surface plankton at the equator. But whereas tropical plankton will have

Figure 12. Annual temperature ranges along the latitudinal transect between southern New Zealand and McMurdo Sound. A: Tautuku Peninsula, 46°36'S, (C. Hay, University of Canterbury, pers. comm., 1975); B: Campbell Island, 52°33'S, (E. Farkas, New Zealand Meteorological Service, pers. comm., 1975); C: Anvers Island, 64°48'S, (Lowry, 1975); D: McMurdo Sound, 77°51'S, (Littlepage, 1965).

Figure 13. Solar energy capture gradient (●——●) and temperature gradient (○——○) for the Southern Hemisphere (after Stehli, 1968).


A
46°S
B
52°S
C
64°S
D
77°S
-2
0
2
4
6
8
10
12
14
16°C


%
°C
90
70
50
30
25
15
5
-5
INSOLATION
TEMPERATURE
0
30
60
90°S
LATITUDE

its energy input spread evenly over the year with approximately 12 hourly light and dark periods, the polar plankton will receive the bulk of its yearly supply in one approximately four month period of continuous sunlight. El-Sayed (1968, 1970) found high primary productivity in the coastal areas of New Zealand, the Ross Sea, and along the inshore areas of the Antarctic Peninsula. He illustrated (1970) a doubling of the carbon fixation rate between 35°S and 75°S in the area between New Zealand and the Ross Sea. Other workers who have reported high primary productivity rates from the inshore areas of the Antarctic Peninsula include El-Sayed, Mandelli and Sagimura (1964), Mandelli and Burkholder (1966), and Horne, Fogge and Eagle (1969). Hedgpeth (1969) using this data calculated that the waters south of the Antarctic Convergence are "400% more productive than the rest of the oceans". Such a large amount of pelagic food production may be expected to support dense populations of benthic invertebrates. Furthermore these populations may be expected to be highly diverse for Connell and Orias (1964) have suggested that in a stable environment more energy can be directed towards growth and reproduction and less to coping with the environment. This leads to increased genetic variability, because of the larger gene pool, and to narrower niches through specialization which ultimately increases diversity.

METHODS

FIELD AND LABORATORY WORK

Sampling and Sieving

All samples were taken between 11 m and 250 m depth. Samples from Cape Hallett and Cape Bird were somewhat deeper than samples from other areas because of the boulder bottoms above 30 m depth and the uniformity of the bottom between 30 m and 200 m. All samples except those from Arthur Harbour were collected with a 0.1 m^2 Smith-McIntyre grab. This is a spring loaded sampler which takes a consistent sample in normal sea conditions and may be made heavier or lighter for sampling from hard sand to soft mud (see Smith and McIntyre, 1954; Wigley, 1967). The samples from Arthur Harbour were collected with a 0.06 m^2 Petersen grab. Samples were washed through a 1 mm screen, in accordance with Maré's (1942) definition of macrofauna.

Sediments

The method used for analyzing the Arthur Harbour sediments was described by Lowry (1975). The Cape Bird sediments were analyzed by Mr W. Farrelly, then of the Department of Geography, University of Canterbury. All other sediments were analyzed in the Department of Geology, University of Canterbury by Mr M. MacPherson and myself. The sand and gravel fraction was analyzed with U.S. Standard Sieves using the techniques of Folk (1974). The mud fraction was analyzed using a hydrophotometer, model 7312.

Identification and Curation

Samples were stored in 10% buffered formalin in sea water until they could be sorted. They were then transferred to fresh water and sorted in petri dishes under a dissecting microscope. Each species was identified as far as possible, and the individuals counted. Further identifications were made by specialists (see acknowledgments). They were then placed in small vials with 70% alcohol, labelled, and stored in large containers by family.

Polychaetes, bivalves, and peracarid crustaceans were the most abundant animals in all samples and they were given the most attention. Foraminifera were common in some areas but only forms which could be recognized as living at the time of capture were used in the study.

Trophic Structure

To determine the basic trophic structure of each community, identified taxa were classified into feeding types. The feeding types of major interest here are suspension-feeders and deposit-feeders. The remaining types such as omnivores, predators, and scavengers have been lumped together in one group. In classifying the polychaetes I have relied on the work of Dales (1967) and Day (1967), and personal communication with Knox (University of Canterbury, 1975). For the bivalve molluscs I have consulted Nicol (1969) and Meglitsch (1972). To classify the amphipods I have referred to Enequist (1949), Kanneworff (1965), Barnard (1962), and Mills (1967), and for the ostracods I have consulted Cannon (1933) and Kornicker (1975) and Kornicker (Smithsonian Institution, pers. comm., 1975). For smaller groups such as sipunculids and priapulids, I have relied on Meglitsch (1972).

DATA PROCESSING AND STATISTICAL ANALYSES

Data Processing

Data were analyzed on a Burroughs 6700 computer. The program for analyzing heterogeneity, species richness, and equitability was written by Dr C.L. McLay, Department of Zoology, University of Canterbury. The program for analyzing species richness by Hurlbert's method (1971) was written by Dr W.P. Barit, Department of Mathematics, University of Canterbury.

Rank Analysis

To obtain a standard method for determining numerical dominance among the macrobenthos from each area a rank analysis was used (Fager, 1957). In each sample from each area the top 10 species were ranked by number. The most abundant species was given a score of 10, the next was given a score of nine, and so on. The values for each species were multiplied to give a score for that species, and they were then ranked in descending order. Frequency of occurrence is expressed in percent.

Species Diversity

Peet (1974) reviewed the problems centred around the "concept-cluster diversity". In addition to tightening up definitions of many of the terms now in general use he also provided guidelines for the proper use of many of the indices. I have followed these guidelines whenever discussing diversity in this paper. The term diversity as used here refers to a combination of species richness, heterogeneity and equitability.

Species Richness

The simplest component of diversity is the number of species present. Because it is usually impossible to know all of the species present in an area under investigation this measurement is normally based on a series of samples. However as sample size increases the proportional increase between species and individuals becomes logarithmic. Margalef (1958) developed the following formula to measure this relationship:

$$R = \frac{(S-1)}{\log N}$$

where S is the number of species and N is the number of individuals. To use this index Peet (1974) stated that "the functional relationship between the expected number of species E(S) and the number of individuals in the sample N remains constant among the communities being studied" and that "the precise functional relationship is known". Obviously there would be little value in comparing the number of bird species in a beech forest with the number of amphipods in a benthic community, or crustacean species in the plankton with insects in the tundra, but one might reasonably expect this to be a good comparative measure between several macrobenthic communities living under similar conditions, especially if weighed with other information. This component of diversity is often called species richness.

Heterogeneity

One of the most useful concepts of diversity has centred around the integration of the number of species and the distribution of individuals among the species. The most useful method of measuring this has been the formula of Shannon (1948) based on information theory:

$$H' = -\Sigma P_i \log_2 P_i$$

where P_i equals the actual proportions of individuals in the population. However P_i may be estimated by n_i/N where N equals the total number of individuals and n_i is the number of individuals in the i^{th} species of the sampled population. This statistic is a measure of the uncertainty of encounter between any two species in the community under study. The more species in a community and the more evenly distributed are the individuals among the species, then the greater is the uncertainty of any two species meeting, and the more uncertain the encounter the higher the heterogeneity. The applicability of this measure to sampled populations is discussed fully by Pielou (1966A, B, 1967).

Species Equitability

Lloyd and Ghelardi (1964) introduced the term equitability to describe the component of diversity which is concerned with the proportional distribution of individuals among species in the population. In their concept species richness is dependent on the structural diversity of the habitat, whereas equitability is more dependent on the stability of the physical environment. In order to measure equitability, heterogeneity must be compared with some standard everness for the population. This may be done by using Shannon's (1948) formula to calculate the maximum theoretical heterogeneity of the population. Maximum theoretical heterogeneity occurs when all individuals in the population are evenly distributed among all species. The ratio of the heterogeneity value for the community to the maximum theoretical heterogeneity value is a measure of the equitability of the community. This is expressed by Pielou (1967) as:

$$J' = H'/H'_{max}$$

where Shannon's formula is used in both the numerator and the denominator.

RESULTS

SEDIMENT DESCRIPTION

Because of the well established correlation between animal distribution and sediment type (Sanders, 1958; Grey, 1974; Rhoads, 1974) it was originally intended to sample similar sediment types along the transect, but in general they range from sandy-silt bottoms to almost pure sand bottoms (figures 14-17). The sediment samples from Perseverance Harbour were lost and never recovered.

In the North Arm of Port Pegasus the bottom sediments ranged from silty-sand to sandy-silt, with the two fractions comprising about equal percentage weights of the sediments. The sands were mainly fine to very fine and the largest fraction of silt was coarse (figure 14). Clay usually made up less than 3% of the sediment, and gravel less than 2%.

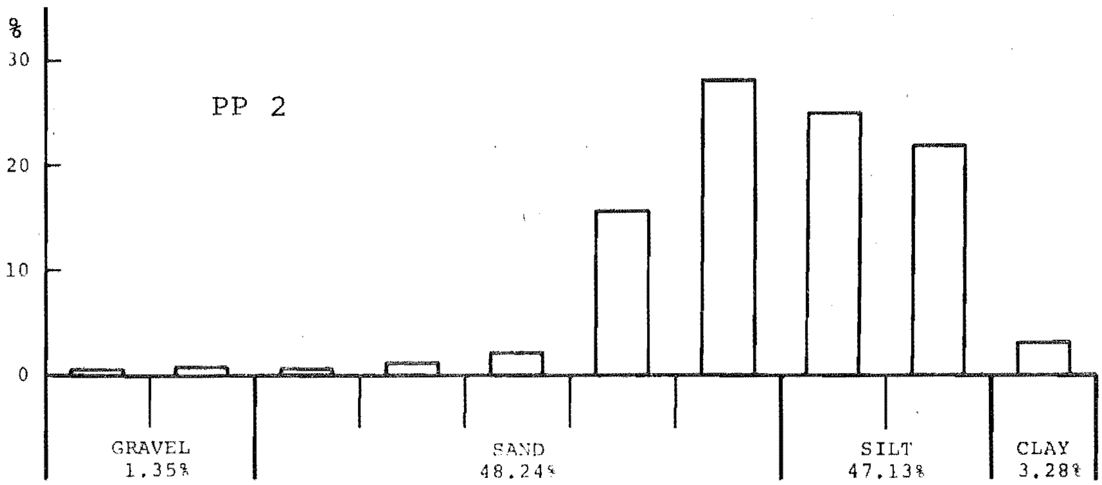
The sediments in Waterfall Inlet and in Sandy Bay, Auckland Islands were 84% to 97% sand (figure 15). The sediments from Waterfall Inlet had a higher silt content, and are termed silty-sands. Most of the particles fall in the range from medium sand to coarse silt. The Sandy Bay bottom was nearly pure sand in the size range from medium to very fine. Gravel and clay fractions from all of the Auckland Islands samples are 1% or less.

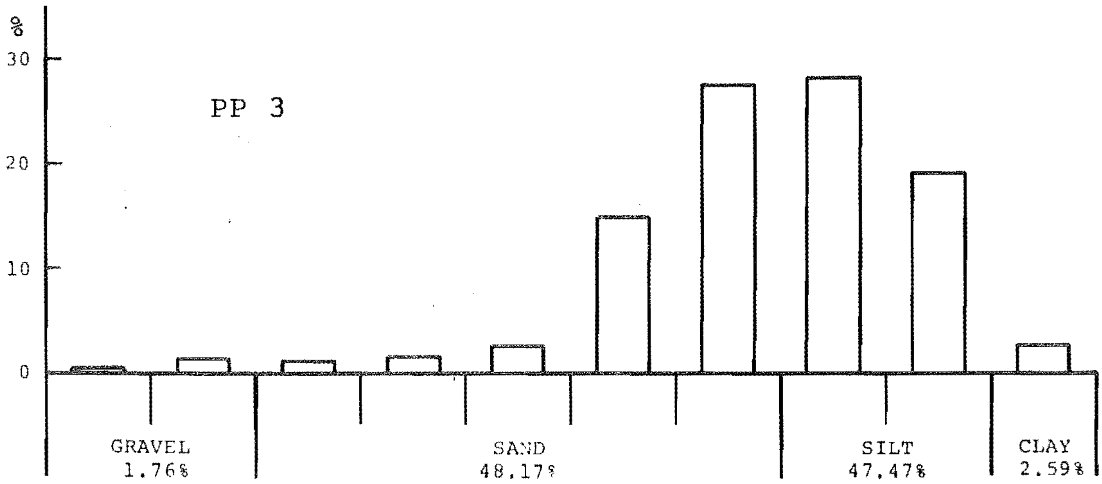
The sediments from the western side of Arthur Harbour have been described by Lowry (1975). The bottom was composed of sandy-mud with a mud content varying from 50% to 96% of the total weight, and a sand fraction varying from 7% to 48%.

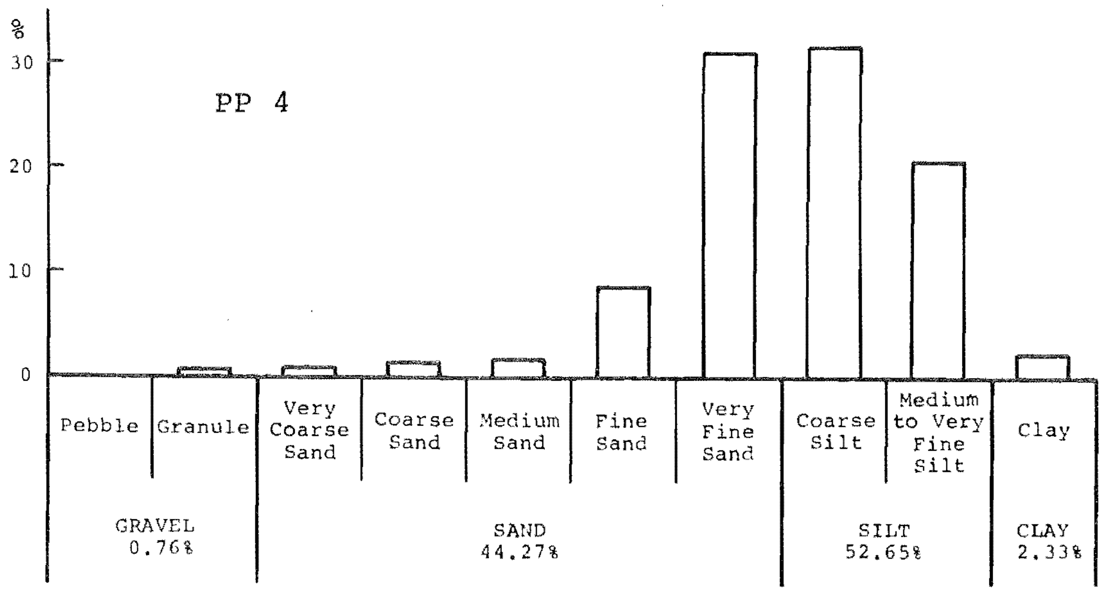
In Moubray Bay, Cape Hallett, at CH 1, 3, 4 the bottom was composed of silty-sand with small amounts of gravel and clay present (figure 16). On this silty-sand bottom the main fraction of particles was fine to very fine sands. But at CH 2 the sand fraction was less pronounced and the gravel fraction increased to form a silty-gravelly-sand bottom.

The bottom at Cape Bird was 87% to 96% sand and similar in particle size distribution to the Auckland Islands except that a larger gravel fraction was present (figure 17). Only the sediment at CB 2 had a mud fraction, and CB 4 had a large enough gravel fraction to be classified as a gravelly-sand bottom. Cape Bird has the lowest mud fraction of any station along the transect.

Figure 14. Distribution of grain size fractions in samples PP 2 - PP 4, North Arm, Port Pegasus, Stewart Island.


%
30
20
10
0
PP 2
GRAVEL
1.35%
SAND
48.24%
SILT
47.13%
CLAY
3.28%


%
30
20
10
0
PP 3
GRAVEL
1.76%
SAND
48.17%
SILT
47.47%
CLAY
2.59%


%
30
20
10
0
PP 4
Pebble
Granule
Very Coarse Sand
Coarse Sand
Medium Sand
Fine Sand
Very Fine Sand
Coarse Silt
Medium to Very Fine Silt
Clay
GRAVEL
0.76%
SAND
44.27%
SILT
52.65%
CLAY
2.33%

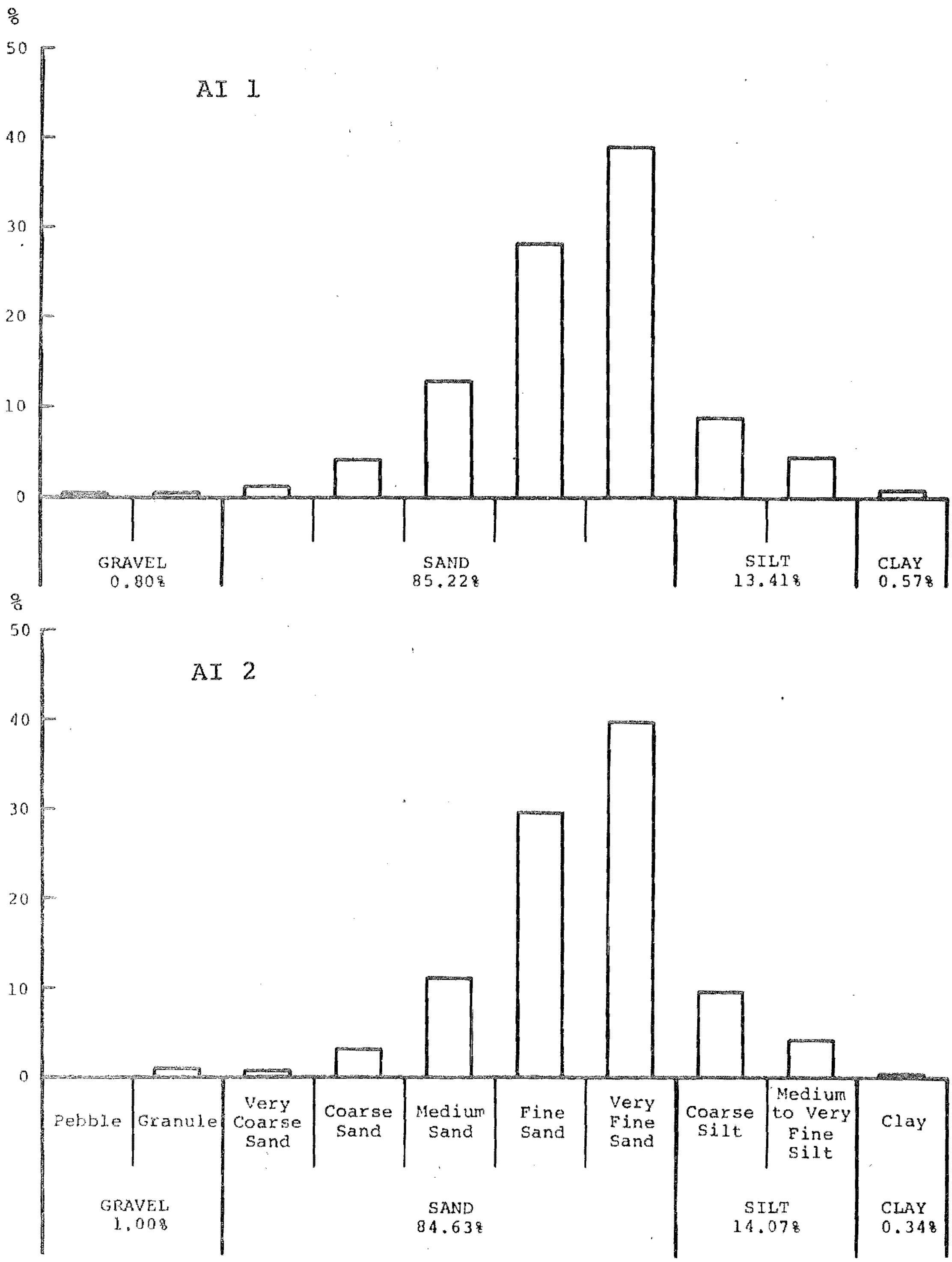
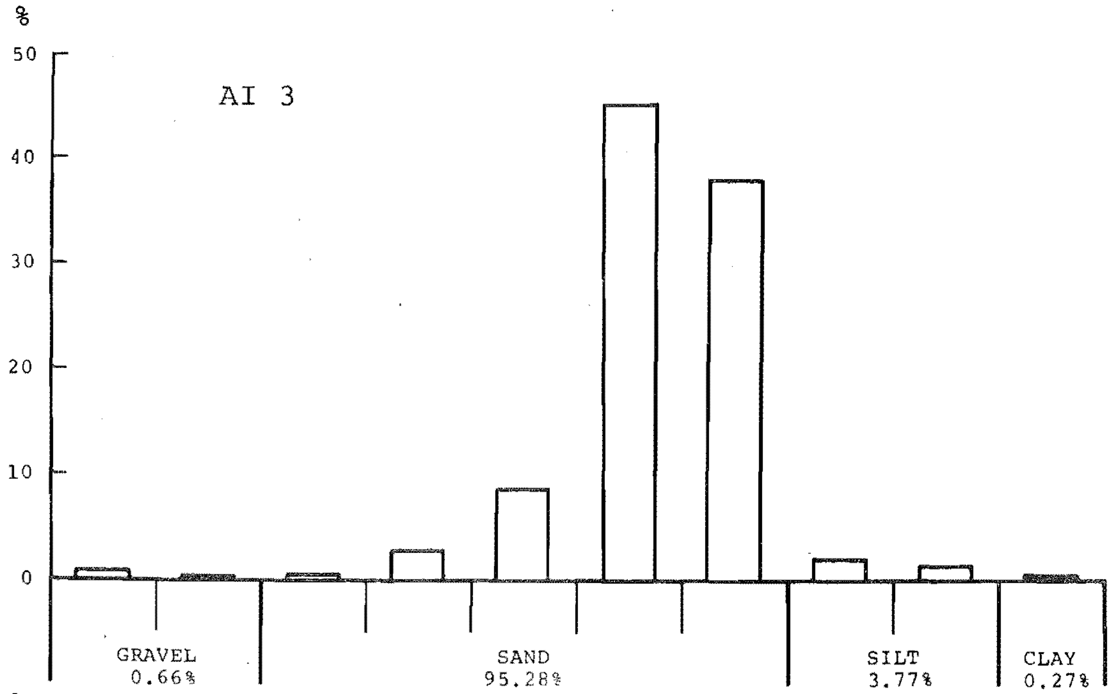
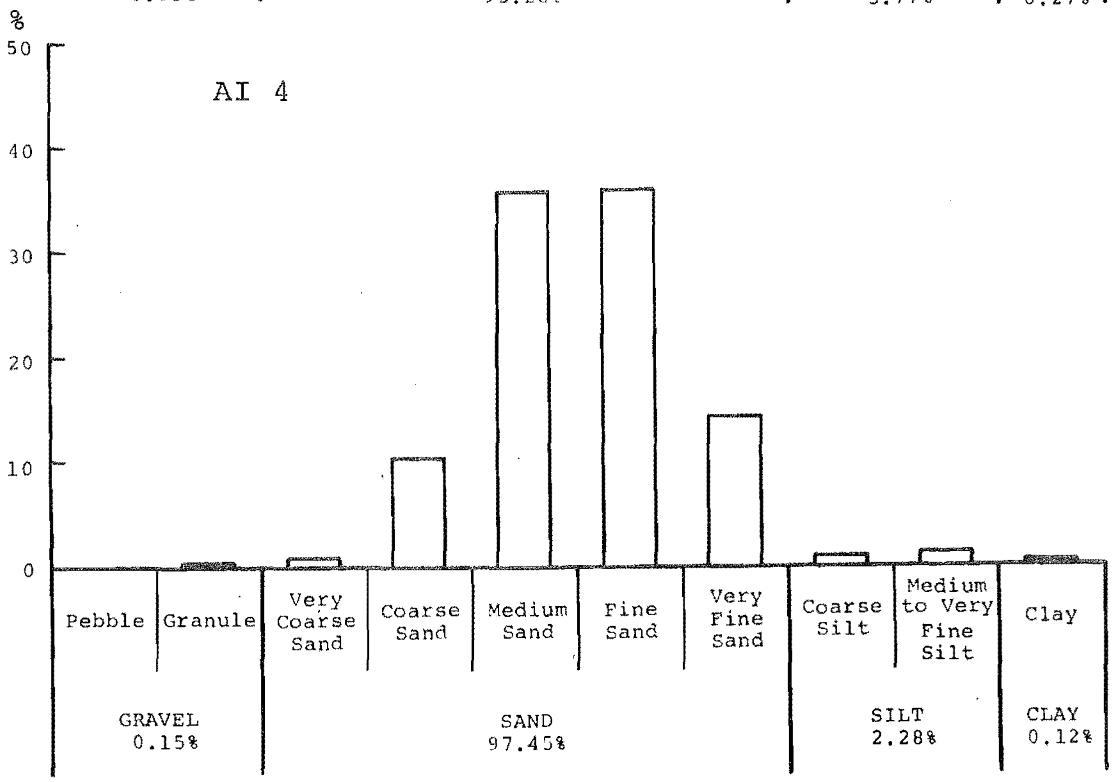


Figure 15. Distribution of grain size fractions in samples AI 1, AI 2, Waterfall Inlet, and AI 3, AI 4, Sandy Bay, Auckland Islands.


%
50
40
30
20
10
0
AI 3
GRAVEL
0.66%
SAND
95.28%
SILT
3.77%
CLAY
0.27%


%
50
40
30
20
10
0
AI 4
Pebble
Granule
Very Coarse Sand
Coarse Sand
Medium Sand
Fine Sand
Very Fine Sand
Coarse Silt
Medium to Very Fine Silt
Clay
GRAVEL
0.15%
SAND
97.45%
SILT
2.28%
CLAY
0.12%

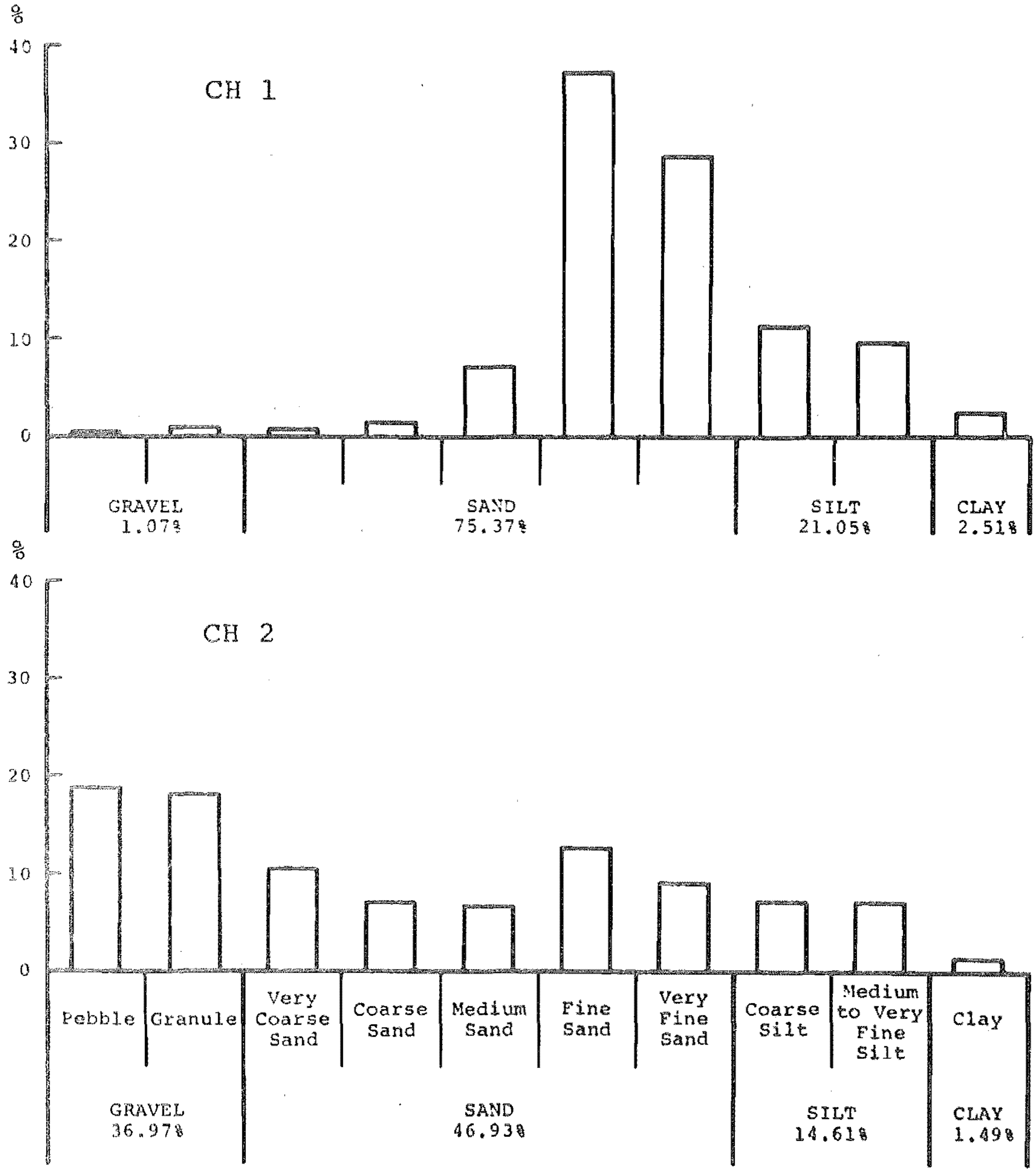
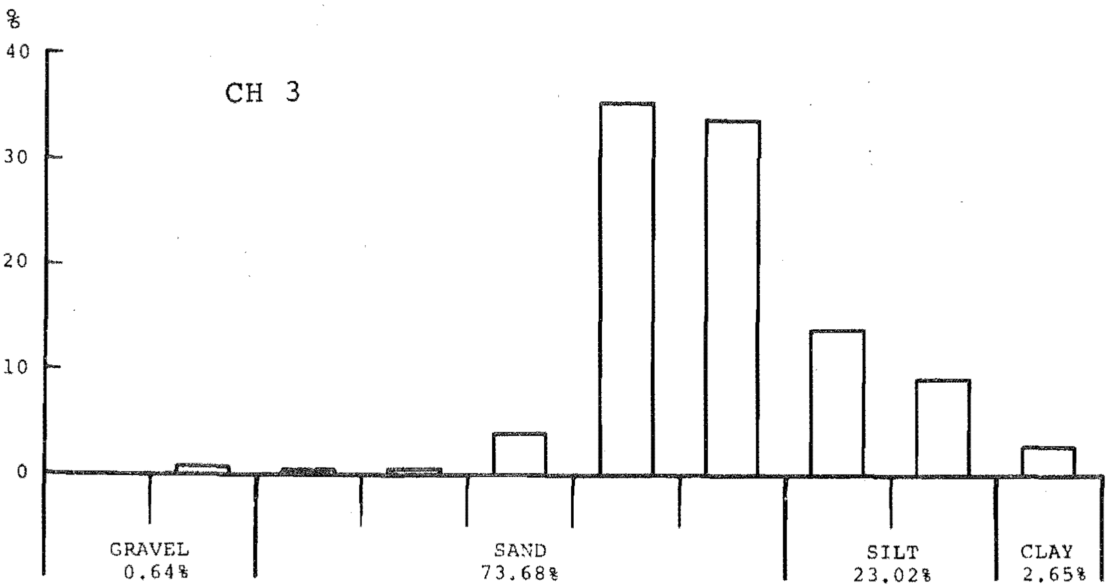


Figure 16. Distribution of grain size fractions in samples CH 1 - CH 4, Moubray Bay, Cape Hallett.


%
40
30
20
10
0
CH 3
GRAVEL
0.64%
SAND
73.68%
SILT
23.02%
CLAY
2.65%

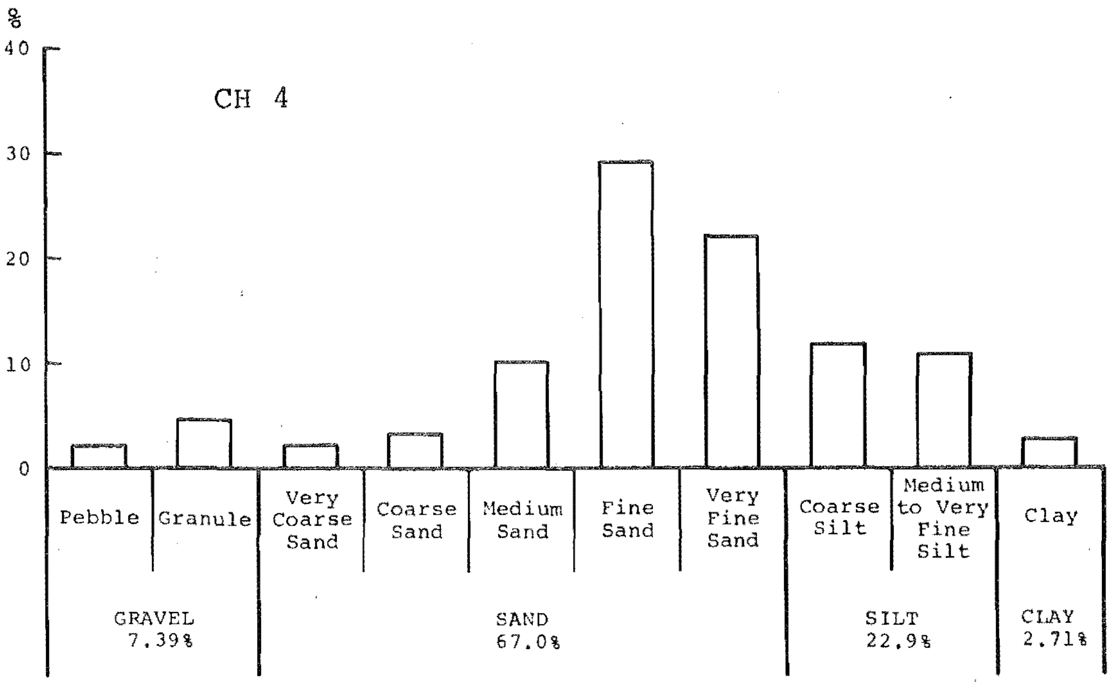
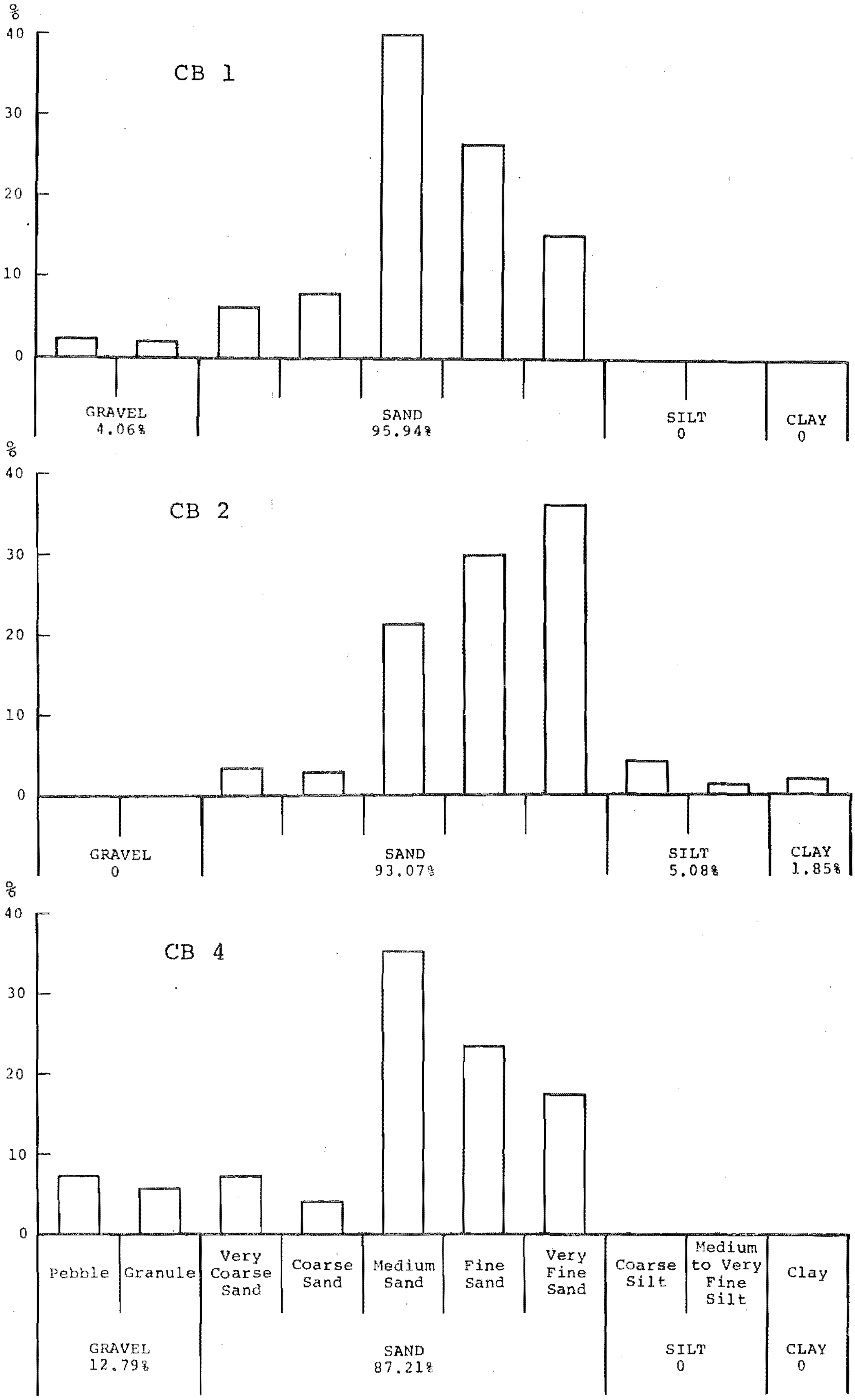

%
40
30
20
10
0
CH 4
Pebble
Granule
Very Coarse Sand
Coarse Sand
Medium Sand
Fine Sand
Very Fine Sand
Coarse Silt
Medium to Very Fine Silt
Clay
GRAVEL
7.39%
SAND
67.0%
SILT
22.9%
CLAY
2.71%

Figure 17. Distribution of grain size fractions in samples CB 1, CB 2, CB 4, Cape Bird, Ross Island.


%
40
30
20
10
0
CB 1
GRAVEL
4.06%
SAND
95.94%
SILT
0
CLAY
0
%
40
30
20
10
0
CB 2
GRAVEL
0
SAND
93.07%
SILT
5.08%
CLAY
1.85%
%
40
30
20
10
0
CB 4
Pebble
Granule
Very Coarse Sand
Coarse Sand
Medium Sand
Fine Sand
Very Fine Sand
Coarse Silt
Medium to Very Fine Silt
Clay
GRAVEL
12.79%
SAND
87.21%
SILT
0
CLAY
0

Farrelly (1972) has given a more complete description of the Cape Bird offshore sediments.

The most similar bottom types occur between the Auckland Islands and Cape Bird which both have sandy bottoms. Port Pegasus and Moubray Bay have somewhat similar sediment types, but the sediments in Moubray Bay have a larger sand and gravel fraction. The bottom of the western side of Arthur Harbour has a higher mud fraction than any of the other stations, and is considered a sandy-mud bottom.

COMMUNITY DESCRIPTION

PORT PEGASUS, 47°S

Numerical Dominants

One hundred and seven invertebrate species and 1186 individuals comprise the Port Pegasus samples (Table 5). Ten of these species are present in every sample and make up 19% of the species and 76% of the individuals. The rank analysis (Table 1) indicates that the protobranch *Nucula dunedinensis* is the most abundant and evenly distributed species in the samples. The sedentary polychaetes *Phyllochaetopterus socialis* and *Maldane* sp. also have even distributions, but are only half as abundant as *N. dunedinensis*. Other abundant bivalves include the protobranch *Solemya parkinsoni* and the eulamellibranchs *Limatula suteri* and *Diplodonta rakiura*. Two ubiquitous polychaetes *Lumbrineris magalhaensis* and *Notomastus latericeus* rank next in the top 10 near the eulamellibranch *Nucinella maorianus*. The only numerically important crustacean in these samples is the pardaliscid amphipod *Halice sublittoralis*.

In contrast the remaining species are numerically unimportant and unevenly distributed. Forty-seven percent of the species occur in only one sample and make up 6% of the total numbers. These include widespread New Zealand forms such as *Aglaophamus verrilli*, *Diastylis neozelanica*, and *Nemocardium pulchellum*.

Component Groups

Most of the species and individuals in the Port Pegasus community are bivalves, peracarids, and polychaetes (Table 2).

Table 1. Rank analysis of the summer macrobenthos in North Arm, Port Pegasus, Stewart Island, based on numerical dominance and frequency of occurrence of the top 10 species in each sample.

		PP 1	PP 2	PP 3	PP 4	f	Score
1	*Nucula dunedinensis*	10	10	10	10	100	10 000
2	*Phyllochaetopterus socialis*	5	9	8	7	100	2520
3	*Solemya parkinsoni*	9	6	7	6	100	1800
4	*Limatula suteri*	6	5	5	8	100	1200
5	*Maldane* sp.	–	8	9	9	75	648
6	*Diplodonta rakiura*	7	7	4	2	100	392
7	*Lumbrineris magalhaensis*	4	4	3	5	100	240
8	*Nucinella maorianus*	8	–	–	3	50	24
9	*Halice sublittoralis*	–	2	–	4	50	8
10	*Notomastus latericeus*	3	–	2	–	50	6
11	*Dorvillea incerta*	–	1	6	–	50	6
12	*Cossura* sp.	–	3	–	–	25	3
13	*Diplodonta globus*	2	–	–	–	25	2
14	*Exogone heterosetosa*	–	–	–	1	25	1
15	*Ceradocus* sp.	1	–	–	–	25	1
16	*Phoxocephalus regium*	–	–	–	1	25	1

Although bivalves do not have a large number of species they have the largest population of any group present. The polychaetes have a slightly lower population but they represent the largest number of species in the community. Peracarids have a large number of species but very few individuals. Thus the major components of the Port Pegasus community are polychaetes and bivalves which represent over 50% of the species present and 86% of the individuals.

Table 2. Breakdown of the major groups comprising the summer macrobenthos in North Arm, Port Pegasus, Stewart Island.

	Species		Individuals	
	No.	%	No.	%
Bivalvia	15	11%	537	45%
Peracarida	24	22%	108	9%
Polychaeta	44	41%	486	41%
Total	83	78%	1131	95%
Miscellaneous	24	22%	55	5%

Trophic Structure

The Port Pegasus macrobenthic samples represent a mixed suspension, deposit-feeding community with 33% of the individuals made up of suspension-feeders and 55% made up of deposit-feeders (Table 3). In the suspension-feeding fraction there are a large number of bivalves (55% of the individuals) and proportionally smaller numbers of polychaetes (34%), peracarid crustaceans (8%), and other miscellaneous groups (3%). The veneroid bivalves are the most diverse group with seven species in six families. The most important of these are the ungulids *Diplodonta rakiura* ($138/m^2$) and *D. globus* ($43/m^2$). Among the pteroids the limid *Limatula suteri* ($175/m^2$) is the most common suspension-feeder. Among the arcoids, the nucinellid *Nucinella maorianus* ($85/m^2$) is also common. These four species make up the majority of the bivalve suspension-feeders. The only common peracarid suspension-feeder is the pardaliscid amphipod *Halice sublittoralis* ($63/m^2$). Polychaetes make up 23% of the suspension-feeding species and 34% of the individuals with *Phyllochaetopterus socialis* (255/m^2) as the most abundant species. Although sabellid and spionid polychaetes are represented by five species in as many genera they are never abundant in the samples. Among the miscellaneous suspension-feeders the alcyonarian *Virgularia gracillima* is very rare. The anomuran decapod *Callianassa filholi* is also rare in these samples, but it is known to be more abundant in sandier areas of Port Pegasus.

Deposit-feeders are the major feeding group in Port Pegasus and the bivalves with 53% of the individuals are again the numerically dominant group although they compose only 8% of the species (Table 3). The dominant species is the nuculid *Nucula dunedinensis* (610/m^2) and to a lesser extent the solemyid *Solemya parkinsoni* (255/m^2). Peracarid crustaceans are represented by a large percentage of the species (32%), but only 10% of the deposit-feeding individuals. There are three species in as many genera of cumaceans including *Diastylis neozelanica*, but all are rare. The tanaid *Leptochelia tenuis* is also rare. Amphipods are the most diverse peracarid group with eight species in six families, but only the phoxocephalid *Phoxocephalus regium* (53/m^2) is common. The Corophiidae is represented by three species in three genera, and there is a gammarid, a liljeborgiid, a lysianassid, and an oedicerotid among the remaining amphipods. The polychaetes have the richest species composition and they make up 33% of the individuals. The most diverse family is the Maldanidae with four species in as many genera. *Maldane* sp. (253/m^2) is the most common deposit-feeding polychaete. The large capitellid *Notomastus latericeus* (50/m^2), the cossurid *Cossura* sp. (45/m^2), and the trichobranchid *Terebellides stroemii* (35/m^2) are also well represented. Other rare deposit-feeding polychaetes include two cirratulids, two orbiniids, two spionids, two terebellids, an ampharetid, and the opheliid *Armandia maculata*.

Among the remaining feeding types in Port Pegasus the possible omnivores *Lumbrineris magalhaensis* (123/m^2), and *Dorvillea incerta* (43/m^2) are common along with the carnivorous syllid *Exogone heterosetosa* (85/m^2).

Thus it appears that the majority of the Port Pegasus community is composed of deposit-feeders and suspension-feeders. Six of the top 10 deposit-feeders are sedentary polychaetes, two are protobranch bivalves, and two are peracarid crustaceans. Among the suspension-

Table 3. Trophic structure of the summer macrobenthos in North Arm, Port Pegasus, Stewart Island, based on 72% of the species and 95% of the individuals (see Appendix II for detailed breakdown of trophic structure).

	Species	%	Individuals	%
Suspension-feeders	26	34%	375	33%
Deposit-feeders	37	48%	617	54%
Remainder (Omnivores, Carnivores, Scavengers)	14	18%	154	13%
Suspension-feeders				
Bivalvia	11	42%	205	55%
Peracarida	3	11%	32	8%
Polychaeta	6	23%	127	34%
Miscellaneous	6	23%	11	3%
Deposit-feeders				
Bivalvia	3	8%	331	53%
Peracarida	12	32%	61	10%
Polychaeta	17	46%	204	33%
Miscellaneous	5	14%	22	4%
Remainder (Omnivores, Carnivores, Scavengers)				
Peracarida	1	8%	3	2%
Polychaeta	11	84%	149	97%
Miscellaneous	1	8%	2	2%

feeders six of the top 10 are eulamellibranch bivalves, two are polychaetes, and two are peracarids. Polychaetes dominate the omnivorous, carnivorous remainder of the feeding types. Thus polychaetes and bivalves share a major role in the trophic structure of the Port Pegasus community.

Species Diversity

The Port Pegasus samples are characterized by high species richness, equitability, and heterogeneity (Table 4). These high values reflect the mixed suspension, deposit-feeding community structure where contrasting basic feeding types allow more different kinds of animals to coexist within the community, thereby increasing species richness and heterogeneity. The low population levels of the dominant species and the large number of rare species cause high equitability values.

Table 4. Species diversity statistics for the summer macrobenthos in North Arm, Port Pegasus, Stewart Island.

	Species heterogeneity	Species richness	Species equitability
PP 1	4.40	9.55	0.77
PP 2	4.44	9.53	0.77
PP 3	4.83	11.40	0.80
PP 4	4.43	7.76	0.80

Table 5. Structure of the summer macrobenthic community in North Arm, Port Pegasus, Stewart Island, based on the accumulated totals of samples PP 1 - PP 4. Species are listed in order of abundance.

Rank	Species	Individuals	Percent fauna	Cumulative percent fauna
1	*Nucula dunedinensis*	244	20.57	20.57
2	*Phyllochaetopterus socialis*	102	8.60	29.17
3	*Maldane* sp.	101	8.52	37.69
4	*Solemya parkinsoni*	82	6.91	44.60
5	*Limatula suteri*	70	5.90	50.50
6	*Diplodonta rakiura*	55	4.64	55.14
7	*Lumbrineris magalhaensis*	49	4.13	59.27
8	*Exogone heterosetosa*	34	2.87	62.14
9	*Nucinella maorianus*	34	2.87	65.01
10	*Halice sublittoralis*	25	2.11	67.12
11	*Phoxocephalus regium*	21	1.77	68.89
12	*Notomastus latericeus*	20	1.69	70.58
13	*Cossura* sp.	18	1.52	72.10
14	*Diplodonta globus*	17	1.43	73.53
15	*Dorvillea incerta*	17	1.43	74.96
16	Syllid 85	17	1.43	76.39
17	*Terebellides stroemii*	14	1.18	77.57
18	*Praxillella* sp.	13	1.10	78.67
19	Orbiniid 57	12	1.01	79.68
20	*Boccardia* sp.	11	0.93	80.61
21	*Ceradocus* sp.	11	0.93	81.54
22	*Lepidasthenia* sp.	10	0.84	82.38
23	*Parvithracia suteri*	9	0.76	83.14
24	*Thyasira peroniana peregrina*	9	0.76	83.90
25	Sipunculid 2	8	0.67	84.57
26	*Syllis cornuta*	7	0.59	85.16
27	*Dentalium zelandicum*	6	0.50	85.66
28	*Pleuromeris marshalli*	6	0.50	86.16
29	*Cirratulus* sp. 41	5	0.42	86.58

30	*Euchone* sp. B	5	0.42	87.00
31	*Leptochelia tenuis*	5	0.42	87.42
32	*Leptostylis recalvastra*	5	0.42	87.84
33	*Liljeborgia* sp. A	5	0.42	88.26
34	Mysid 1	5	0.42	88.68
35	*Nuculana bellula*	5	0.42	89.10
36	Oedicerotid 80	5	0.42	89.52
37	Podocopid 7	5	0.42	89.94
38	*Armandia maculata*	4	0.34	90.28
39	*Callianassa filholi*	4	0.34	90.66
40	*Euchone* sp. A	4	0.34	90.96
41	*Gammaropsis* sp. A	4	0.34	91.30
42	*Leaena* sp.	4	0.34	91.64
43	*Phascolosoma* sp.	4	0.34	92.98
44	*Spio* sp. A	4	0.34	92.32
45	*Pachychelium* sp.	3	0.25	92.57
46	Pagurid 1	3	0.25	92.88
47	Polychaete 78	3	0.25	93.07
48	*Pseudoprotomima* sp.	3	0.25	93.32
49	Syllid 70	3	0.25	93.57
50	*Artacama proboscidea*	2	0.17	93.74
51	Brachiopod 1	2	0.17	93.91
52	*Cadulus teliger*	2	0.17	94.08
53	Holothurian 1	2	0.17	94.25
54	*Idomene* sp.	2	0.17	94.42
55	Isopod 15	2	0.17	94.59
56	Isopod 17	2	0.17	94.76
57	Mysid 2	2	0.17	94.93
58	*Nemocardium pulchellum*	2	0.17	95.10
59	*Nicomache* sp.	2	0.17	95.27
60	*Lumbrineris galatheae*	2	0.17	95.44
61	*Ophiodromus angustifrons*	2	0.17	95.61
62	Ophiuroid 1	2	0.17	95.78
63	Ophiuroid 2	2	0.17	95.95
64	*Orbinia* sp. 56	2	0.17	96.12
65	*Rhodine* sp.	2	0.17	96.29
66	*Scolelepis antipoda*	2	0.17	96.46
67	Tunicate 2	2	0.17	96.63
68	*Aglaophamus verrilli*	1	0.084	96.71

69	*Amphicteis* sp.	1	0.084	96.80
70	Amphipod 85	1	0.084	96.88
71	*Aorcho* sp.	1	0.084	96.97
72	*Astacilla fusiformis*	1	0.084	97.05
73	*Astacilla tuberculata*	1	0.084	97.13
74	*Branchiomma* sp. A	1	0.084	97.22
75	Solenogastre 1	1	0.084	97.30
76	*Cirriformia* sp.	1	0.084	97.39
77	Cyclopoid 1	1	0.084	97.47
78	*Dasychone* sp.	1	0.084	97.55
79	*Diastylopsis thileniusi*	1	0.084	97.64
80	*Diastylis neozelanica*	1	0.084	97.72
81	*Dorvillea australis*	1	0.084	97.81
82	Enteropneustid	1	0.084	97.89
83	*Eteone* sp.	1	0.084	97.97
84	Eunicid 46	1	0.084	98.06
85	Isopod 16	1	0.084	98.14
86	*Melliteryx parva*	1	0.084	98.23
87	*Monia zelandica*	1	0.084	98.31
88	*Muelleriella hispida*	1	0.084	98.39
89	Nimertean 1	1	0.084	98.48
90	*Ninoe falklandica*	1	0.084	98.56
91	*Notocallista multistriata*	1	0.084	98.65
92	*Onuphis* sp.	1	0.084	98.73
93	*Orchomene* sp. A	1	0.084	98.81
94	*Paramithrax ? peronii*	1	0.084	98.90
95	*Photis nigrocula*	1	0.084	98.98
96	*Photis phaeocula*	1	0.084	99.07
97	Eunicid 84	1	0.084	99.15
98	Heterospionid 88	1	0.084	99.23
99	Syllid 69	1	0.084	99.32
100	Syllid 86	1	0.084	99.40
101	*Pontophilus australus*	1	0.084	99.49
102	*Prionospio malmgreni*	1	0.084	99.57
103	*Streptoleberis arcuata*	1	0.084	99.65
104	*Tawera* sp. A	1	0.084	99.74
105	Tunicate 1	1	0.084	99.82
106	*Virgularia gracillima*	1	0.084	99.91

107	*Waltonia* sp.	1	0.084	99.99

The total number of species represented by samples PP 1 - PP 4 was 107 and the total number of individuals was 1186, which represents 2965/m^2.

AUCKLAND ISLANDS, 50°S

Numerical Dominants

The four samples from the Auckland Islands contain 83 species and 18,849 individuals (Table 10) which is much more than the previous station. Seventeen percent of the species occur in every sample and comprise 80% of the sampled population. The sedentary polychaetes *Spiophanes* sp. A and *Euchone* sp. A are the most abundant and widespread members of the community (Table 6). Among the peracarids, the tanaidacean *Anatanais novaezealandiae* is also abundant in all samples, but the cumacean *Diastylis neozelanica*, although abundant, is numerically important only in samples AI 1 and AI 2. The eulamellibranch *Perrierina aucklandica* is very abundant in samples AI 3 and AI 4. Common species occurring in all samples include the polychaetes *Exogone heterosetosa, Axiothella quadrimaculata*, the eulamellibranch *Mysella unidentata*, and Oligochaete 3. Other species occurring in high numbers but not in all samples include the polychaetes *Boccardia* sp. and *Spio* sp., the eulamellibranch *Cyamium problematicum*, and the amphipod *Lembos* sp. 2.

About 30% of the species occur in only one sample, but among these the amphipod *Paraphoxus* sp., the foraminiferan *Psammosphaera* sp., and the polychaete *Lumbrineris sphaerocephala* are numerically important.

Component Groups

Polychaetes, peracarid crustaceans, and bivalve molluscs totally dominate the Auckland Islands community (Table 7). However, within these groups the polychaetes possess a majority of both the species and the individuals. Peracarids are also an important part of the community. Their species richness is high and they have large populations. Bivalves are not as important here as they were in Port Pegasus. They have a large number of individuals but the number of species is low and the majority of the population belongs to one species, *Perrierina aucklandica*.

Table 6. Rank analysis of the summer macrobenthos in Waterfall Inlet (AI 1, AI 2), and Sandy Bay (AI 3, AI 4), Auckland Islands, based on numerical dominance and frequency of occurrence of the top 10 species in each sample.

		AI 1	AI 2	AI 3	AI 4	f	Score
1	*Spiophanes* sp.	9	10	7	10	100	6300
2	*Euchone* sp.	10	8	5	7	100	2800
3	*Anatanais novaezealandiae*	5	6	9	4	100	2800
4	*Perrierina aucklandiae*	-	-	10	8	50	80
5	*Diastylis neozelanica*	8	9	-	-	50	72
6	*Axiothella quadrimaculata*	6	5	2	-	75	60
7	*Spio* sp.	7	7	-	-	50	49
8	*Boccardia* sp.	-	-	8	5	50	40
9	*Cyamium problematicum*	-	-	6	2	50	12
10	Capitellidae n. g.	3	4	-	-	50	12
11	*Exogone heterosetosa*	-	-	-	9	25	9
12	*Lembos* sp. 2	-	-	-	6	25	6
13	*Aonides trifidus*	2	2	-	-	50	4
14	*Lumbrineris magalhaensis*	4	1	-	-	50	4
15	*Paraphoxus* sp.	-	-	-	4	25	4
16	*Caprellina longicollis*	-	-	-	3	25	3
17	*Mysella unidentata*	-	-	3	-	25	3
18	Cirratulid 101	1	3	-	-	50	3
19	Oligochaete 3	-	-	-	1	25	1

Table 7. Breakdown of the major groups comprising the summer macrobenthos in Waterfall Inlet and Sandy Bay, Auckland Islands.

	Species		Individuals	
	No.	%	No.	%
Bivalvia	10	12%	5167	27%
Peracarida	24	29%	3722	20%
Polychaeta	33	40%	9602	51%
Total	67	81%	18 669	98%
Miscellaneous	16	19%	358	2%

Trophic Structure

At the Auckland Islands 70% of the populations in Sandy Bay and Waterfall Inlet are made up of suspension-feeders, although they contribute only 21% of the species (Table 8). This dominance is due to the very large populations of the cyamiid bivalve *Perrierina aucklandica* (11 035/m^2), the spionid polychaete *Spiophanes* sp. A (10 080/m^2), and the sabellid polychaete *Euchone* sp. A (5600/m^2). The latter two species are particularly important members of the community being first and second in the rank analysis. In spite of the numerical dominance of these three species, veneroid bivalves are fairly diverse and comprise 47% of the suspension-feeding species with seven genera and species in four families. Another cyamiid *Cyamium probelmaticum* (1037/m^2) is well represented, as is the lasaeid *Mysella unidentata* (490/m^2) and the ungulid *Diplodonta rakiura* (217/m^2). Peracarids comprise less than 1% of the population and are represented by a mysid and the corophiid amphipod *Haplocheira barbimana*. Polychaetes make up only 27% of the suspension-feeding species, but all the species are common. The spionids *Boccardia* sp. (2290/m^2) and *Spio* sp. (1542/m^2) and the burrowing actinarian *Edwardsia tricolor* (50/m^2) complete the suspension-feeding assemblage.

Deposit-feeders are a much more diverse element of the Auckland Islands community, for although they comprise only 25% of the population they contribute 58% of the species (Table 8). Bivalves are relatively unimportant with only three species and less than 1%

Table 8. Trophic structure of the summer macrobenthos in Waterfall Inlet and Sandy Bay, Auckland Islands, based on 79% of the species and 98% of the individuals (see Appendix II for detailed breakdown of trophic structure).

	Species	%	Individuals	%
Suspension-feeders	14	21%	12 948	70%
Deposit-feeders	38	58%	4689	25%
Remainder (Omnivores, Carnivores, Scavengers)	14	21%	1025	5%
Suspension-feeders				
Bivalvia	7	47%	5132	40%
Peracarida	2	13%	27	<1%
Polychaeta	4	27%	7769	60%
Miscellaneous	1	6%	20	<1%
Deposit-feeders				
Bivalvia	3	8%	35	<1%
Peracarida	19	50%	3537	76%
Polychaeta	12	32%	951	20%
Miscellaneous	4	10%	166	4%
Remainder (Omnivores, Carnivores, Scavengers)				
Peracarida	1	7%	142	14%
Polychaeta	10	72%	851	83%
Miscellaneous	3	21%	32	3%

of the population. The widespread subantarctic nuculoids *Nucula dunedinensis, N. nitidula,* and *Solemya parkinsoni* comprise this sparse population. Peracarids are definitely the most important deposit-feeders with half of the species and three quarters of the population. Cumaceans are represented by two species, but the diastylid *Diastylis neozelanica* (2875/m^2) is the second most abundant deposit-feeder. Tanaidaceans are only represented by three species, but the tanaid *Anatanais novaezealandiae* (4122/m^2) is very abundant and is third in the rank analysis (Table 6). A munnid isopod *Munna neozelanica* is present, but rare. Amphipods are the most diverse group with nine families, 13 genera and as many species. The most common deposit-feeder is the corophiid *Lembos* sp. 2 (785/m^2) followed by the phoxocephalids *Paraphoxus* sp. (275/m^2) and *Phoxocephalus regium* (167/m^2), the lysianassid *Parawaldeckia* sp. (202/m^2), and the haustoriid *Urothoe* sp. B (75/m^2). There is also an interesting synopiid *Tiron* sp. (100/m^2) which occurs regularly in the Auckland Islands community. Deposit-feeding polychaetes are represented by 11 genera and species in six families. The Maldanidae contain only two genera and species, but it is the most abundant family. *Axiothella quadrimaculata* (652/m^2) is sixth in the rank analysis (Table 6), and *Euclymene* sp. (325/m^2) is also abundant. The spionids *Aonides trifidus* (292/m^2) and *Prionospio malmgreni* (175/m^2), the capitellids Capitellid n.g. (232/m^2) and *Notomastus latericeus* (187/m^2), and Cirratulid 101 (377/m^2) make up the majority of the deposit-feeding polychaete population. Oligochaete 3 (377/m^2) is also common.

The remaining group of carnivores, omnivores, and scavengers are diverse and common in the Auckland Islands community. Peracarids are represented only by the phtiscid amphipod *Caprellina longicollis* (355/m^2). Polychaetes are more diverse, but the main representatives are the syllids *Exogone heterosetosa* (1537/m^2) and *Syllis cornuta* (200/m^2), the nereid *Nereis cricognatha* (137/m^2), and the lumbrinerids *Lumbrineris sphaerocephala* (137/m^2), and *L. magalhaensis* (102/m^2). The large glycerids *Glycera tesselata* and *Hemipodus simplex* are present but rare. The juvenile portunid crab *Nectocarcinus bennetti* (50/m^2) is common in Waterfall Inlet and the stomatopod *Heterosquilla tricarinata* is found in Sandy Bay.

Thus at the Auckland Islands suspension-feeders dominate the community. Four of the top 10 suspension-feeders are eulamellibranch bivalves, four are polychaetes, and there is one peracarid crustacean and one burrowing anemone. Among the deposit-feeders there are six sedentary polychaetes, three peracarid crustaceans and one oligochaete. Polychaetes and crustaceans dominate the remaining trophic types. Consequently polychaetes play a major role in the feeding structure of the community, but the role of the bivalves is declining in comparison to the community in Port Pegasus, and the peracarids are becoming more important.

Species Diversity

The Auckland Islands samples are characterized by moderate numbers of species, dominated by a few species with large numbers of individuals. Seventy percent of the sampled population is represented by 6% of the species, and of the remaining population more than 50% of the species represent 1% of the population. This structure is reflected in the species diversity statistics by low values for species richness, equitability, and heterogeneity (Table 9). There is only a moderate number of species in the community and only a few of these play an important numerical role, thus lowering the richness value. The uneven distribution of individuals among the species lowers the equitability and the heterogeneity.

Nonetheless these types of diversity statistics may be inherent in this type of community where suspension-feeders and tube building invertebrates play a dominant role. If the dominant suspension-feeders and those species apparently associated with them are ignored, then the community begins to look much more like the other deposit-feeding communities in this study. Once these overwhelming dominants disappear, equitability, and heterogeneity increase.

Table 9. Species diversity statistics for the summer macrobenthos in Waterfall Inlet and Sandy Bay, Auckland Islands.

	Species heterogeneity	Species richness	Species equitability
AI 1	3.13	5.83	0.56
AI 2	3.12	5.52	0.56
AI 3	2.65	4.67	0.49
AI 4	3.40	5.64	0.61

Table 10. Structure of the summer macrobenthic community in Waterfall Inlet and Sandy Bay, Auckland Islands, based on the accumulated totals of samples AI 1 - AI 4. Species are listed in order of abundance.

Rank	Species	Individuals	Percent fauna	Cumulative percent fauna
1	*Perrierina aucklandica*	4414	23.42	23.42
2	*Spiophanes* sp. A	4032	21.39	44.81
3	*Euchone* sp. A	2204	11.69	56.50
4	*Anatanais novaezealandiae*	1649	8.75	65.25
5	*Diastylis neozelanica*	1150	6.10	71.35
6	*Boccardia* sp.	916	4.86	76.21
7	*Spio* sp.	617	3.27	79.48
8	*Exogone heterosetosa*	615	3.26	82.74
9	*Cyamium problematicum*	415	2.20	84.94
10	*Lembos* sp. 2	314	1.66	86.60
11	*Axiothella quadrimaculata*	261	1.38	87.98
12	*Mysella unidentata*	196	1.04	89.02
13	Oligochaete 3	152	0.81	89.83
14	Cirratulid 101	151	0.80	90.63
15	*Caprellina longicollis*	142	0.75	91.38
16	*Euclymene* sp.	130	0.69	92.07
17	Capitellidae n.g.	117	0.62	92.69
18	*Paraphoxus* sp.	110	0.58	93.27
19	*Aonides trifidus*	93	0.49	93.76
20	*Diplodonta rakiura*	87	0.46	94.22
21	*Parawaldeckia* sp.	81	0.43	94.65
22	*Syllis cornuta*	79	0.42	95.07
23	*Notomastus latericeus*	75	0.40	95.47
24	*Psammosphaera* sp.	75	0.40	95.87
25	*Prionospio malmgreni*	70	0.37	96.24
26	*Phoxocephalus regium*	67	0.36	96.60
27	*Lumbrineris sphaerocephala*	55	0.29	96.89
28	*Nereis cricognatha*	55	0.29	97.18
29	*Cylichnina striata*	44	0.23	97.41

30	*Lumbrineris magalhaensis*	41	0.22	97.63
31	*Tiron* sp.	38	0.20	97.83
32	Tanaid 8	33	0.18	98.01
33	*Urothoe* sp. B	29	0.15	98.16
34	Mysid 3	26	0.14	98.30
35	*Nucula nitidula*	25	0.13	98.43
36	*Nectocarcinus bennetti*	21	0.11	98.54
37	*Edwardsia tricolor*	20	0.11	98.65
38	*Armandia maculata*	19	0.10	98.75
39	*Heteroleucon* sp.	17	0.09	98.84
40	*Kidderia marshalli*	17	0.09	98.93
41	Orbiniidae n.g.	17	0.09	99.02
42	*Bathymedon* sp.	16	0.08	99.10
43	*Travisia olens*	16	0.08	99.18
44	Anthurid 20	13	0.07	99.25
45	Oligochaete 2	12	0.06	99.31
46	*Munna neozelanica*	11	0.06	99.37
47	*Eulalia* sp. B	9	0.05	99.42
48	Oedicerotid 80	9	0.05	99.47
49	*Subonoba fumata*	8	0.04	99.51
50	*Heterosquilla tricarinata*	7	0.04	99.55
51	*Solemya parkinsoni*	7	0.04	99.59
52	*Lycastis quadraticeps*	6	0.03	99.62
53	*Eulalia* sp. A	5	0.03	99.65
54	*Lumbrineris brevicirra*	5	0.03	99.68
55	*Gondogeneia subantarctica*	4	0.02	99.70
56	*Munna* sp.	4	0.02	99.72
57	Pycnogonid 1	4	0.02	99.74
58	*Cycloberis tenera*	3	0.02	99.76
59	*Cyclopoapseudes dicencon*	3	0.02	99.78
60	*Hemipodus simplex*	3	0.02	99.80
61	*Neonesidea* sp.	3	0.02	99.82
62	*Nucula dunedinensis*	3	0.02	99.84
63	*Paradexamine pacifica*	3	0.02	99.86
64	Sipunculid 3	3	0.02	99.88
65	*Melinnoides* sp.	2	0.01	99.89
66	Nimertine 2	2	0.01	99.90
67	*Paramoera fasciculata*	2	0.01	99.91
68	*Tawera* sp. B	2	0.01	99.92

69	*Dispio* sp.	1	0.005	99.92
70	*Glycera tesselata*	1	0.005	99.93
71	*Haplocheira barbimana*	1	0.005	99.93
72	*Jassa falcata*	1	0.005	99.94
73	*Liagoceradocus* sp.	1	0.005	99.94
74	*Lumbrineris galatheae*	1	0.005	99.95
75	*Nauticaris marionis*	1	0.005	99.95
76	*Ophiodromus angustifrons*	1	0.005	99.96
77	*Phyllo felix*	1	0.005	99.96
78	Phyllodicid 118	1	0.005	99.97
79	*Pontogeneiella levis*	1	0.005	99.97
80	Solenogastre 2	1	0.005	99.98
81	*Sphaerosyllis* sp.	1	0.005	99.98
82	Syllid 120	1	0.005	99.99
83	*Venerupis lagillierti*	1	0.005	99.99

The total number of species represented by samples AI 1 - AI 4 was 83 and the total number of individuals was 18 849, which represents 47 122/m^2.

PERSEVERANCE HARBOUR, 52°S

Numerical Dominants

Perseverance Harbour is characterized by a low number of species (55), and a sampled population of 1379 individuals (Table 15) which is very similar to Port Pegasus. Only six percent of the species occur in all five samples and these make up only 20% of the population. Forty-five percent of the species were collected only once and they make up less than 10% of the population. The sedentary polychaete *Nicomache* sp. and the burrowing amphipods *Proharpinia hurleyi* and *Bathymedon* sp. are the only species which occur in all samples (Table 11). Other species distributed throughout the length of the harbour include the amphipods *Lembos* sp. 2, *Phoxocephalus regium, Gammaropsis* sp. B, the polychaetes *Terebellides stroemii, Praxillella* sp., *Cirriformia* sp., and *Notomastus latericeus*, and the protobranch *Nucula hartvigiana*.

Near the mouth of the harbour where more species are present the numerical dominants are the sedentary polychaetes *Nicomache* sp., *Maldane* sp., and *Paraonis gracilis*, and the peracarids, *Phoxocephalus regium* and Tanaid 9. Further up the harbour numbers of species decrease and the sedentary polychaetes *Nicomache* sp. and *Boccardia* sp., and the peracarids *Lembos* sp. 2 and *Proharpinia hurleyi* become more important.

Component Groups

In the Perseverance Harbour community bivalves do not play a major role. Although by species they are as well represented as in previous communities their population is insignificant. The percentage of peracarid crustacean species remains similar to that of previous communities but the individuals are more numerous and are nearly equal to the polychaete population. Polychaetes share an equal number of species with the peracarids in Perseverance Harbour, but they have a slightly higher population. Polychaete species and numbers throughout the New Zealand Subantarctic samples remain stable.

Table 11. Rank analysis of the summer macrobenthos in Perseverance Harbour, Campbell Island, based on numerical dominance and frequency of occurrence of the top 10 species in each sample.

		PH 1	PH 2	PH 3	PH 4	PH 5	f	Score
1	*Lembos* sp. 2	7	-	10	6	10	80	4200
2	*Nicomache* sp.	-	7	2	9	8	80	1008
3	*Proharpinia hurleyi*	-	1	7	8	7	80	392
4	*Cirriformia* sp.	-	-	8	4	6	60	192
5	*Urothoe* sp. B	4	6	-	7	-	60	168
6	*Phoxocephalus regium*	8	8	-	-	2	60	128
7	*Boccardia* sp.	-	-	-	10	9	40	90
8	*Terebellides stroemii*	2	-	9	-	3	60	54
9	*Notolepton antipodum*	5	5	-	-	-	40	25
10	*Notomastus latericeus*	-	-	-	5	5	40	25
11	Tanaid 9	10	-	-	-	-	20	10
12	*Maldane* sp.	-	10	-	-	-	20	10
13	*Paraonis gracilis*	1	9	-	-	-	40	9
14	*Pionosyllis stylifera*	9	-	-	-	-	20	9
15	*Eudorella* sp. A	6	-	-	-	-	20	6
16	*Bathymedon* sp.	-	-	4	1	1	60	4
17	*Edwardsia tricolor*	-	4	-	-	-	20	4
18	*Praxillella* sp.	-	-	-	-	4	20	4
19	*Gammaropsis* sp. B	3	-	-	-	-	20	3
20	*Cirolana rossi*	-	-	3	-	-	20	3
21	*Nucula hartvigiana*	-	-	-	3	-	20	3
22	*Spiophanes* sp. A	-	3	-	-	-	20	3
23	*Prionospio malmgreni*	-	2	-	-	-	20	2
24	*Lumbrineris magalhaensis*	-	-	-	2	-	20	2
25	*Haplocheira barbimana*	-	-	1	-	-	20	1

Table 12. Breakdown of the major groups comprising the summer macrobenthos in Perseverance Harbour, Campbell Island.

	Species		Individuals	
	No.	%	No.	%
Bivalvia	7	13%	52	4%
Peracarida	17	31%	596	43%
Polychaeta	19	34%	683	50%
Total	43	78%	1331	97%
Miscellaneous	12	22%	47	3%

Trophic Structure

Seventy-four percent of the sampled Perseverance Harbour macrobenthic population and 64% of the species are deposit-feeders (Table 13). Suspension-feeders comprise 22% of the population and 20% of the species. There are four species of suspension-feeding bivalves but only one kelliellid *Notolepton antipodum* ($46/m^2$) is at all common. Peracarids are even less well represented, with one mysid and the corophiid amphipod *Haplocheira barbimana*. Two species of tube building spionids *Boccardia* sp. ($470/m^2$) and *Spiophanes* sp. A ($28/m^2$) represent the polychaete suspension-feeders. The actinarian *Edwardsia tricolor* is uncommon in the harbour.

Among the deposit-feeders peracarids and polychaetes share dominance of species and individuals (Table 13). Bivalves are represented by only token populations of the familiar protobranchs *Nucula hartvigiana* and *Solemya parkinsoni*. Peracarids comprise 58% of the population. Near the entrance to the harbour the tanaidacean Tanaid 9 ($82/m^2$) is conspicuous. Amphipods are the most diverse and abundant deposit-feeding peracarids, and the most abundant representative is the corophiid *Lembos* sp. 2 ($532/m^2$). The Phoxocephalidae is represented by two common species, *Proharpinia hurleyi* ($210/m^2$) and *Phoxocephalus regium* ($130/m^2$). Other less common species include the haustoriid *Urothoe* sp. B ($84/m^2$) and the oedicerotid *Bathymedon* sp. ($36/m^2$). Polychaetes have as many species as peracarids in Perseverance Harbour, but are not quite as common, comprising 40% of the individuals. As usual

Table 13. Trophic structure of the summer macrobenthos in Perseverance Harbour, Campbell Island, based on 84% of the species and 97% of the individuals (see Appendix II for detailed breakdown of trophic structure).

	Species	%	Individuals	%
Suspension-feeders	9	20%	299	22%
Deposit-feeders	29	64%	993	74%
Remainder (Omnivores, Carnivores, Scavengers)	7	16%	49	4%
Suspension-feeders				
Bivalvia	4	44%	34	11%
Peracarida	2	22%	7	2%
Polychaeta	2	22%	249	83%
Miscellaneous	1	11%	9	3%
Deposit-feeders				
Bivalvia	2	7%	16	2%
Peracarida	12	41%	578	58%
Polychaeta	12	41%	393	40%
Miscellaneous	3	10%	6	<1%
Remainder (Omnivores, Carnivores, Scavengers)				
Peracarida	1	14%	7	14%
Polychaeta	4	57%	40	82%
Decapoda	2	28%	2	4%

the Maldanidae are the most diverse and common polychaete group. *Nicomache* sp. ($310/m^2$) is the most common polychaete in the harbour, and *Maldane* sp. ($86/m^2$) and *Praxillella* sp. ($30/m^2$) are both conspicuous. The trichobranchid *Terebellides stroemii* ($122/m^2$) and the paraonid *Paraonis gracilis* ($96/m^2$) are both common, but *P. gracilis* is more abundant near the harbour entrance. Two other conspicuous polychaetes are the large capitellid *Notomastus latericeus* ($44/m^2$) and the cirratulid *Cirriformia* sp. ($56/m^2$).

Among the remaining trophic groups the flesh eating peracarid *Cirolana* cf. *rossi* is present. Polychaetes are represented by the ubiquitous *Lumbrineris magalhaensis*, a very rare nereid *Nereis cricognatha*, and the syllid *Pionosyllis stylifera* ($68/m^2$). The large decapod scavenger *Munida subrugosa* and an unidentified juvenile pagurid are also present.

The Perseverance Harbour community is dominated by deposit-feeders. Of the top 10 species five are sedentary polychaetes and five are peracarid crustaceans. Among the suspension-feeders four are bivalves, two are peracarids, two are polychaetes, and there is one burrowing anemone. Polychaetes still maintain a major role in the feeding structure of the community, but peracarids share the dominance, and bivalves have become insignificant.

Species Diversity

Species diversity statistics for Perseverance Harbour are generally low, however they group into two areas. PH 1 and PH 2 near the entrance to the harbour show appreciably higher values than samples PH 3 and PH 5 towards the head of the harbour (Table 14). Since the number of individuals from each sample is nearly constant throughout the harbour the differences in values are due to changes in numbers of species and the distribution of individuals among the species. Near the harbour mouth the number of species per sample is moderate compared with Port Pegasus, while the number of individuals is similar. The distribution of individuals among species is very even. This results in high species equitability, moderate richness, and low heterogeneity due to the low numbers of species and individuals. However, proceeding up the harbour these values decrease substantially. The number of species in the western end of the harbour is only half that at the entrance. Furthermore species such as *Lembos* sp. 2, and *Boccardia* sp. become very common. These changes cause a severe drop in equitability, richness, and particularly heterogeneity which are the lowest values in the study.

Table 14. Species diversity statistics for the summer macrobenthos of Perserverance Harbour, Campbell Island.

	Species heterogeneity	Species richness	Species equitability
PH 1	4.27	5.63	0.85
PH 2	3.90	5.23	0.79
PH 3	2.26	2.81	0.57
PH 4	2.73	3.31	0.63
PH 5	2.45	2.21	0.64

Table 15. Structure of the summer macrobenthic community in Perseverance Harbour, Campbell Island, based on the accumulated totals of samples PH 1 - PH 5. Species are listed in order of abundance.

Rank	Species	Individuals	Percent fauna	Cumulative percent fauna
1	*Lembos* sp. 2	266	19.29	19.29
2	*Boccardia* sp.	235	17.04	36.33
3	*Nicomache* sp.	155	11.24	47.57
4	*Proharpinia hurleyi*	105	7.61	55.18
5	*Phoxocephalus regium*	65	4.71	59.89
6	*Terebellides stroemii*	61	4.42	64.31
7	*Paraonis gracilis*	48	3.48	67.79
8	*Maldane* sp.	43	3.12	70.91
9	*Urothoe* sp. B	42	3.04	73.95
10	Tanaid 9	41	2.97	76.92
11	*Pionosyllis stylifera*	34	2.46	79.38
12	*Cirriformia* sp.	28	2.03	81.41
13	*Notolepton antipodum*	23	1.67	83.08
14	*Notomastus latericeus*	22	1.60	84.68
15	*Bathymedon* sp.	18	1.30	85.98
16	*Gammaropsis* sp. B	17	1.23	87.21
17	*Praxillella* sp.	15	1.09	88.30
18	*Spiophanes* sp. A	14	1.02	89.32
19	*Eudorella* sp. A	13	0.94	90.26
20	*Nucula hartvigiana*	13	0.94	91.20
21	*Prionospio malmgreni*	12	0.87	92.07
22	*Edwardsia tricolor*	9	0.65	92.72
23	*Maorithyas flemingi*	9	0.65	93.37
24	*Merelina* sp.	9	0.65	94.02
25	Ophiuroid 3	8	0.58	94.60
26	*Cirolana ? rossi*	7	0.51	95.11
27	*Cylichnina striata*	7	0.51	95.62
28	*Tryphosella* sp. A	7	0.51	96.13
29	*Haplocheira barbimana*	5	0.36	96.49

30	*Armandia maculata*	4	0.29	96.78
31	*Lumbrineris magalhaensis*	4	0.29	97.07
32	Capitellidae n.g.	3	0.22	97.29
33	*Eurycope* sp.	3	0.22	97.51
34	Nematode 1	3	0.22	97.73
35	Oligochaete 3	3	0.22	97.95
36	*Solemya parkinsoni*	3	0.22	98.17
37	*Hiatella australis*	2	0.14	98.31
38	*Liljeborgia* sp. B	2	0.14	98.45
39	Mysid 3	2	0.14	98.59
40	*Priapulus tuberculatospinosus*	2	0.14	98.73
41	*Specula canaliculata*	2	0.14	98.87
42	*Cymodoce australis*	2	0.14	99.01
43	*Eulalia microphylla*	1	0.07	99.08
44	*Gitanopsis* sp.	1	0.07	99.15
45	*Gondogeneia subantarctica*	1	0.07	99.22
46	*Harmothoe* sp.	1	0.07	99.29
47	*Hyboscolex longipes*	1	0.07	99.36
48	*Monia zelandica*	1	0.07	99.43
49	*Munida subrugosa*	1	0.07	99.50
50	*Nemocardium pulchellum*	1	0.07	99.57
51	*Nereis cricognatha*	1	0.07	99.64
52	Pagurid 2	1	0.07	99.71
53	*Paphia* sp.	1	0.07	99.78
54	*Scolelepis antipoda*	1	0.07	99.85
55	Sipunculid 4	1	0.07	99.92

The total number of species represented by samples PH 1 - PH 5 was 55 and the total number of individuals was 1379, which represents 2758/m^2.

ARTHUR HARBOUR, 64°S

These samples were taken by the author between December 1967 and February 1968. A complete description of the community is given by Lowry (1975). The samples are comparable with the present collections because only the summer collections are used. These represent 0.4 m^2, and include the animals from the 1.0 mm fraction of the sediment.

Numerical Dominants

In the summer samples from Arthur Harbour there are 64 species and 3001 individuals (Table 20). Thirty-six percent of the species occur in all the samples and these comprise 87% of the sampled population. The dominant species are the tube building peracarids *Ampelisca bouvieri*, and *Gammaropsis* (*Megamphopus*) sp. D, and the burrowing polychaete *Apistobranchus* sp. A (Table 16). Other important species are the peracarids *Eudorella* sp. B, and *Harpinia* sp. A, the oligochaete *Torodrilus lowryi*, and the polychaetes *Haploscoloplos kerguelensis, Paraonis gracilis*, and *Capitella perarmata*.

Thirty-one percent of the species in these samples were collected only once and they represent 3.2% of the population. Included in this group are circumantarctic species such as the polychaete *Artacama proboscidea*, the gastropod *Neobuccinum eatoni*, the bivalve *Laternula elliptica*, and the echinoid *Sterechinus neumayeri*.

Component Groups

The dominant groups in Arthur Harbour are peracarids and polychaetes which make up 88% of the summer population. Although bivalves make up 10% of the species, a comparable percentage to the shallow water communities on the Campbell Plateau, they make up only two percent of the population and most of these individuals represent the conspicuous protobranch *Yoldia eightsi*. In the summer population peracarids make up the majority of species and individuals. Lowry (1975) found when studying this community throughout the year that crustaceans made up only 38% of the population and polychaetes made up 40%. In addition the oligochaete *Torodrilus lowryi*

Table 16. Rank analysis of the summer macrobenthos in Arthur Harbour, Anvers Island, based on numerical dominance and frequency of occurrence of the top 10 species in each sample.

		AH 1	AH 2	AH 3	AH 4	f	Score
1	*Ampelisca bouvieri*	9	10	9	10	100	8100
2	*Gammaropsis* (*Megamphopus*) sp. D	8	8	7	8	100	3584
3	*Apistobranchus* sp.	10	7	10	5	100	3500
4	*Torodrilus lowryi*	5	9	6	2	100	540
5	*Eudorella* sp. B	3	4	4	9	100	432
6	*Harpinia* sp. A	7	5	-	7	75	245
7	*Haploscoloplos kerguelensis*	-	3	2	6	75	36
8	*Paraonis gracilis*	6	2	3	-	75	36
9	*Capitella perarmata*	-	-	8	-	25	8
10	*Yoldia eightsi*	-	6	-	-	25	6
11	Nematodes	-	1	5	-	50	5
12	Pagetinidae n.g.	-	-	-	4	25	4
13	*Axiothella* sp. A	4	-	-	-	25	4
14	*Polycirrus* sp.	-	-	-	3	25	3
15	*Harpiniopsis* sp.	2	-	-	-	25	2
16	Lysianassidae n.g.	-	-	-	2	25	2
17	*Methalimedon nordenskjoldi*	1	-	-	1	50	1
18	*Rhodine loveni*	-	-	1	-	25	1

contributed 11% of the individuals in the yearly population. Crustaceans tended to have higher summer populations in Arthur Harbour and annelids tended to increase in numbers during the winter. This may be due to timing of the release of young into the environment.

Table 17. Breakdown of the major groups comprising the summer macrobenthos in the western side of Arthur Harbour, Anvers Island.

	Species		Individuals	
	No.	%	No.	%
Bivalvia	7	11%	75	2%
Peracarida	26	41%	1593	53%
Polychaeta	22	34%	1047	35%
Total	55	86%	2715	90%
Miscellaneous	9	14%	288	10%

Trophic Structure

In Arthur Harbour 79% of the individuals and 73% of the species are deposit-feeders (Table 18). Twenty percent of the species are suspension-feeders, but they make up only 20% of the sampled population. Bivalves comprise half of the suspension-feeding species, but only 3% of the population. The most common species is *Thyasira bongraini* ($33/m^2$), but *Laternula elliptica* may be more abundant than its low numbers imply because it burrows deeply and is not available to the grab (McCain and Stout, 1969). The peracarid amphipods are represented by two species of the Ampeliscidae and two species of Corophiidae. *Ampelisca bouvieri* ($1190/m^2$) dominates the population, while *Kuphocheira setimanus* ($100/m^2$) and *Haplocheira* sp. ($53/m^2$) are moderately abundant. The sabellids and tube dwelling spionids which are common in other sampled areas are not found here.

The large proportion of deposit-feeders are evenly distributed among the peracarids and the polychaetes. The only deposit-feeding bivalve is the nuculoidean *Yoldia eightsi* ($130/m^2$). There are four species of cumaceans in three families, but the only common representative is the leuconid *Eudorella* sp. ($645/m^2$). Tanaidaceans are

Table 18. Trophic structure of the summer macrobenthos in Arthur Harbour, Anvers Island, based on 81% of the species and 95% of the individuals (see Appendix II for detailed breakdown of trophic structure).

	Species	%	Individuals	%
Suspension-feeders	10	19%	567	20%
Deposit-feeders	38	73%	2228	79%
Remainder (Omnivores, Carnivores, Scavengers)	4	8%	38	1%
Suspension-feeders				
Bivalvia	5	50%	18	3%
Peracarida	4	40%	542	96%
Polychaeta	-	-	-	-
Miscellaneous	1	10%	7	1%
Deposit-feeders				
Bivalvia	1	2%	52	2%
Peracarida	17	44%	962	43%
Polychaeta	18	49%	1016	46%
Miscellaneous	2	5%	198	9%
Remainder (Omnivores, Carnivores, Scavengers)				
Polychaeta	4	100%	38	100%

represented by two species, but neither *Leptognathia* sp. A ($70/m^2$) nor *Nototanais antarcticus* ($35/m^2$) are common. The Amphipoda are diverse in Arthur Harbour with 11 species in nine genera and six families. The most common species is the corophiid *Gammaropsis* (*Megamphopus*) sp. D ($808/m^2$), however the Phoxocephalidae is the most diverse family with four species in three genera. *Harpinia* sp. A ($355/m^2$) and *Harpiniopsis* sp. ($183/m^2$) are well represented. The Oedicerotidae is represented by three species in two genera, of which *Methalimedon nordenskjoldi* ($160/m^2$) and *Monoculodes* sp. ($68/m^2$) are common. The only other common amphipod is the haustoriid *Urothoe* sp. C ($63/m^2$). Polychaetes share dominance of the deposit-feeders with the peracarids and are represented by 10 families, and 18 genera and species. The most common polychaetes are the apistobranchid *Apistobranchus* sp. A ($1015/m^2$), the capitellid *Capitella perarmata* ($358/m^2$), the orbiniid *Haploscoloplos kerguelensis* ($288/m^2$), and *Paraonis gracilis* ($255/m^2$). The Maldanidae is the most diverse family with five genera and species, of which *Rhodine loveni* ($160/m^2$), *Axiothella* sp. A ($113/m^2$), and *Lumbriclymenella robusta* are the most common. The oligochaete *Torodrilus lowryi* ($450/m^2$) is also a common member of the Arthur Harbour macrobenthos.

The omnivores and carnivores are all polychaetes of which *Aglaophamus ornatus* ($68/m^2$) is the most common. The large polynoid *Barrukia cristata* is also present.

Species Diversity

Based on the Arthur Harbour summer samples species richness is not particularly high (Table 19). There are only 69 species in the samples which is comparable to the Perseverance Harbour community. However, equitability is high reflecting the even distribution of individuals among the species. Heterogeneity appears to be lowered by the low number of species present in the population.

Table 19. Species diversity statistics for the summer macrobenthos in Arthur Harbour, Anvers Island.

	Species heterogeneity	Species richness	Species equitability
AH 1	4.00	6.31	0.75
AH 2	4.28	5.50	0.83
AH 3	3.91	6.29	0.72
AH 4	4.04	7.22	0.72

Table 20. Structure of the summer macrobenthic community in the western side of Arthur Harbour, Anvers Island, based on the accumulated totals of samples AH 1 - AH 4. Species are listed in order of abundance.

Rank	Species	Individuals	Percent fauna	Cumulative percent fauna
1	*Ampelisca bouvieri*	476	15.86	15.86
2	*Apistobranchus* sp. A	406	13.53	29.39
3	*Gammaropsis (Megamphopus)* sp. D	323	10.76	40.15
4	*Eudorella* sp. B	238	7.93	48.08
5	*Torodrilus lowryi*	180	6.00	54.08
6	*Capitella perarmata*	143	4.76	58.84
7	*Harpinia* sp. A	142	4.73	63.57
8	*Haploscoloplos kerguelensis*	115	3.83	67.40
9	*Paraonis gracilis*	102	3.40	70.80
10	Nematodes	82	2.73	73.53
11	*Harpiniopsis* sp.	73	2.43	75.96
12	*Methalimedon nordenskjoldi*	64	2.13	78.09
13	*Rhodine loveni*	64	2.13	80.22
14	*Yoldia eightsi*	52	1.73	81.95
15	*Axiothella* sp. A	45	1.50	83.45
16	*Kuphocheira setimanus*	40	1.33	84.78
17	*Ammotrypane* sp.	34	1.13	85.91
18	*Leptognathia* sp. B	28	0.93	86.84
19	*Aglaophamus ornatus*	27	0.90	87.74
20	*Monoculodes* sp.	27	0.90	88.64
21	*Urothoe* sp. C	25	0.83	89.47
22	*Heterophoxus videns*	24	0.80	90.27
23	Pagetinidae n.g.	22	0.73	91.00
24	*Haplocheira* sp.	21	0.70	91.70
25	Lysianassidae n.g.	20	0.67	92.37
26	*Polycirrus* sp.	20	0.67	93.04
27	*Philomedes orbicularis*	18	0.60	93.64
28	*Octobranchus antarcticus*	17	0.57	94.21

29	*Lumbriclymenella robusta*	16	0.53	94.74
30	*Nototanais antarcticus*	14	0.47	95.21
31	*Terebellides stroemii*	14	0.47	95.68
32	*Echinozone spinosa*	13	0.43	96.11
33	*Thyasira bongraini*	13	0.43	96.54
34	*Artacama proboscidea*	10	0.33	96.87
35	*Harpinia* sp. B	10	0.33	97.20
36	*Tharyx epitoca*	10	0.33	97.53
37	*Vaunthompsonia inermis*	10	0.33	97.86
38	*Barrukia cristata*	6	0.20	98.06
39	*Maldane sarsi*	6	0.20	98.26
40	*Ampelisca eschrichtii*	5	0.17	98.43
41	*Diastylis* sp. A	5	0.17	98.60
42	*Limopsis lillei*	3	0.10	98.70
43	*Lumbrineris antarcticus*	3	0.10	98.80
44	*Praxillella kerguelensis*	3	0.10	98.90
45	*Serolis polita*	3	0.10	99.00
46	*Thracia meridionalis*	3	0.10	99.10
47	*Brada villosa*	2	0.07	99.17
48	*Cyclocardia astartoides*	2	0.07	99.24
49	*Eunoe opalina*	2	0.07	99.31
50	*Exspina* sp.	2	0.07	99.38
51	*Haliacris antarcticus*	2	0.07	99.45
52	*Nebaliella extrema*	2	0.07	99.52
53	*Philine alata*	2	0.07	99.59
54	*Thelepides koehleri*	2	0.07	99.66
55	*Cyamiocardium denticulatum*	1	0.03	99.69
56	*Flabelligera gourdoni*	1	0.03	99.72
57	*Laternula elliptica*	1	0.03	99.75
58	*Monoculodes scabriculosus*	1	0.03	99.78
59	*Neobuccinum eatoni*	1	0.03	99.81
60	Nimertine 3	1	0.03	99.84
61	*Paraphoxus uncinatus*	1	0.03	99.87
62	*Sterechinus neumayeri*	1	0.03	99.90
63	*Subonoba* spp.	1	0.03	99.93
64	*Uristes* sp.	1	0.03	99.96

The total number of species represented by samples AH 1 - AH 4 was 64 and the total number of individuals was 3001, which represents 7502/m^2.

CAPE HALLETT, 72°S

Numerical Dominants

The Moubray Bay samples have more species (147) than any other area in the study, and a sampled population of 3102 individuals (Table 25), which is very similar to Arthur Harbour. Sixteen percent of the species occur in all samples, but they make up only 33% of the sampled population. The most important species appear to be the sedentary polychaetes *Spiophanes tcherniai* and *Potamilla antarctica*, which are abundant and widespread in all four samples (Table 21). Other important species are the eulamellibranch *Thyasira bongraini*, the sedentary polychaetes *Laonice cirrata*, *Neosabellides elongatus*, and *Maldane sarsi*, the tubificid oligochaete *Torodrilus lowryi* and the foraminiferan *Pelosina* sp. In the shallower samples CH 1, 104 m, and CH 2, 134 m, the most common species, along with *S. tcherniai* and *P. antarctica*, are the polychaetes *N. elongatus* and *Myxicola* sp. and the peracarids *Leucon antarctica*, *Orchomene franklini*, *Metaphoxus* sp., *Leptognathia antarctica*, and *Neoxenodice cryophile*. In the deeper samples CH 3, 208 m, and CH 4, 250 m, *Thyasira bongraini* and *Torodrilus lowryi* become more conspicuous. Forty-seven percent of the species from Moubray Bay were only collected once and represent 8% of the sampled population.

Component Groups

In Moubray Bay polychaetes and peracarids dominate the benthos (Table 22). Peracarids make up 42% of the total number of species sampled, and they represent one quarter of the sampled population. Polychaetes make up another one third of the species and one half of the population. Bivalves play an insignificant role supported only by the abundance of *Thyasira bongraini*.

Table 21. Rank analysis of the summer macrobenthos in Moubray Bay, Cape Hallett, based on numerical dominance and frequency of occurrence of the top 10 species in each sample.

		CH 1	CH 2	CH 3	CH 4	f	Score
1	*Spiophanes tcherniai*	5	10	6	5	100	1500
2	*Potamilla antarctica*	-	9	7	4	75	252
3	*Laonice cirrata*	-	4	4	6	75	96
4	*Thyasira bongraini*	-	-	9	10	50	90
5	*Torodrilus lowryi*	-	-	8	9	50	72
6	*Neosabellides elongatus*	7	6	-	1	75	42
7	*Pelosina* sp.	6	-	5	-	50	30
8	Nematode 2	-	-	3	7	50	21
9	*Nymphon australis*	4	5	-	-	50	20
10	*Maldane sarsi*	2	-	10	-	50	20
11	*Leucon antarctica*	8	2	-	-	50	16
12	*Myxicola* sp.	10	-	-	-	25	10
13	*Orchomene franklini*	9	-	-	-	25	9
14	*Chaetozone spinosa*	-	-	1	8	50	8
15	*Metaphoxus* sp.	-	8	-	-	25	8
16	*Leptognathia antarctica*	-	7	-	-	25	7
17	*Neoxenodice cryophile*	1	3	-	-	50	3
18	*Heterophoxus videns*	3	-	-	-	25	3
19	*Lumbrineris magalhaensis*	-	-	-	3	25	3
20	Nematode 3	-	-	2	-	25	2
21	*Apistobranchus* sp. B	-	-	-	2	25	2
22	*Golfingia ohlini*	-	1	-	-	25	1

Table 22. Breakdown of the major groups comprising the summer macrobenthos in Moubray Bay, Cape Hallett.

	Species		Individuals	
	No.	%	No.	%
Bivalvia	6	4%	166	5%
Peracarida	62	42%	764	25%
Polychaeta	47	32%	1538	50%
Total	155	78%	2468	80%
Miscellaneous	32	22%	634	20%

Trophic Structure

The macrobenthic samples from Moubray Bay are composed mainly of suspension-feeders (41% of the individuals) and deposit-feeders (51% of the individuals) and the community is classified as a mixed suspension, deposit-feeding community. Suspension-feeders represent a large percentage of the population, but they contribute only 14% of the species (Table 23). Bivalves comprise one quarter of these species. The veneroids are represented by two species in two families of which *Thyasira bongraini* (350/m^2) is the most common. Among the pterioids, the limid *Limatula hodgsoni* (30/m^2) is uncommon. Peracarids are an insignificant part of the suspension-feeding component and are represented by the ampeliscid amphipod *Ampelisca macrocephala* (65/m^2) and the arcturid isopod *Antarcturus furcatus* (8/m^2). The latter is rare on soft bottoms. Polychaetes are the most important suspension-feeders and make up 47% of the species and 83% of the individuals. The tube building spionid *Spiophanes tcherniai* (778/m^2), which was first in the rank analysis (Table 21) is the most important suspension-feeder. However, the Sabellidae is represented by six species in as many genera, of which *Potamilla antarctica* (520/m^2) was second in the rank analysis. *Myxicola* sp. (1040/m^2) is the most abundant animal in the community, but has a patchy distribution, occurring only in CH 1.

Among the deposit-feeders only *Yoldia eightsi* (15/m^2) represents the bivalves, and it makes up less than 1% of the population (Table 23). Peracarids are the most important deposit-feeding group with

Table 23. Trophic structure of the summer macrobenthos in Moubray Bay, Cape Hallett, based on 72% of the species and 90% of the individuals (see Appendix II for detailed breakdown of trophic structure).

	Species	%	Individuals	%
Suspension-feeders	15	14%	1153	41%
Deposit-feeders	74	68%	1389	50%
Remainder (Omnivores, Carnivores, Scavengers)	19	18%	253	9%
Suspension-feeders				
Bivalvia	4	26%	164	14%
Peracarida	2	13%	29	2%
Polychaeta	7	47%	955	83%
Miscellaneous	2	13%	5	1%
Deposit-feeders				
Bivalvia	1	1%	6	<1%
Peracarida	43	58%	597	43%
Polychaeta	23	31%	579	42%
Miscellaneous	7	9%	207	15%
Remainder (Omnivores, Carnivores, Scavengers)				
Peracarida	5	26%	85	34%
Polychaeta	12	63%	99	39%
Miscellaneous	2	11%	69	27%

58% of the species and 43% of the individuals. Cumaceans contain four species in as many genera of which the leuconid *Leucon antarctica* (250/m^2) is well represented. The tanaidaceans are also well represented by three species of which the paratanaid *Leptognathia antarctica* (200/m^2) is common. Isopods are diverse in Moubray Bay, but no species is common. There are at least four munnids, two janirids, and an ilyarachnidiid in the community. The amphipods are by far the most diverse peracarids with 12 families, 19 genera, and 23 species. However, the important deposit-feeders are the phoxocephalids *Metaphoxus* sp. (200/m^2) and *Heterophoxus videns* (100/m^2), and the lysianassid *Orchomene franklini* (285/m^2). The polychaetes make up 31% of the deposit-feeding species and 42% of the population, and are just as diverse as the amphipods with 12 families and 23 genera and species present. The Maldanidae is again the most diverse and abundant family with five genera and species of which *Maldane sarsi* (283/m^2) is the most important. An ampharetid *Neosabellides elongatus* (308/m^2) is also important and with the spionid *Laonice cirrata* (212/m^2), the paraonids *Paraonis gracilis* (110/m^2) and *Aedicira belgicae* (88/m^2), the cirratulid *Chaetozone spinosa* (102/m^2), and the orbiniids *Haploscoloplos kerguelensis* (86/m^2) and *Scoloplos marginatus* (45/m^2) comprise the majority of the deposit-feeding population. Among the miscellaneous groups the oligochaete *Torodrilus lowryi* (288/m^2) is common, and myodocopid ostracods are present but rare, as is the sipunculid *Golfingia ohlini*.

The omnivores and carnivores are diverse in Moubray Bay. The main peracarids are the podocerid amphipod *Neoxenodice cryophile* (135/m^2), and the phtiscid amphipod *Caprellinoides mayeri* (58/m^2). Polychaetes are more diverse, but the most abundant species are the lumbrinerid *Lumbrineris magalhaensis* (75/m^2), the hesionid *Syllidia inermis* (52/m^2), and the syllid *Exogone miniscula* (32/m^2). The large polynoid *Barrukia cristata* is conspicuous.

Species Diversity

Although the species richness at CH 1 is high the sample is dominated by *Myxicola* sp. and this caused the equitability and heterogeneity to be lower than the other three samples (Table 24). Samples CH 2 and CH 4 generally show the highest diversity values in this study. This is caused by the high numbers of species in the samples, the relatively low numbers of individuals, and the even distribution of individuals among species. There is also a high proportion of rare species in the samples. Nearly 70% of the species are represented by five or fewer individuals.

Table 24. Species diversity statistics for the summer macrobenthos in Moubray Bay, Cape Hallett.

	Species heterogeneity	Species richness	Species equitability
CH 1	4.04	10.09	0.66
CH 2	4.69	13.32	0.72
CH 3	4.67	9.43	0.79
CH 4	4.95	10.32	0.83

Table 25. Structure of the summer macrobenthic community in Moubray Bay, Cape Hallett, based on the accumulated totals of samples CH 1 - CH 4. Species are listed in order of abundance.

Rank	Species	Individuals	Percent fauna	Cumulative percent fauna
1	*Myxicola* sp.	416	13.41	13.41
2	*Spiophanes tcherniai*	311	10.02	23.43
3	*Potamilla antarctica*	208	6.70	30.13
4	*Thyasira bongraini*	140	4.51	34.64
5	*Neosabellides elongatus*	123	3.96	38.60
6	*Torodrilus lowryi*	115	3.71	42.31
7	*Orchomene franklini*	114	3.68	45.99
8	*Maldane sarsi*	113	3.64	49.63
9	*Leucon antarctica*	101	3.26	52.89
10	*Metaphoxus* sp.	99	3.19	56.08
11	*Laonice cirrata*	85	2.74	58.82
12	*Pelosina* sp.	83	2.68	61.50
13	Leptognathia antarctica	80	2.58	64.08
14	*Nymphon australis*	64	2.06	66.14
15	*Neoxenodice cryophile*	54	1.74	67.88
16	Nematode 2	50	1.61	69.49
17	*Heterophoxus videns*	49	1.58	71.07
18	*Paraonis gracilis*	44	1.42	72.49
19	*Chaetozone spinosa*	41	1.32	73.81
20	*Gnathia antarctica*	35	1.13	74.94
21	*Aedicira belgicae*	35	1.13	76.07
22	*Golfingia ohlini*	35	1.13	77.20
23	*Haploscoloplos kerguelensis*	34	1.10	78.30
24	Ophiuroid 4	29	0.93	79.23
25	*Lumbrineris magalhaensis*	29	0.93	80.16
26	*Apistobranchus* sp. B	27	0.87	81.03
27	*Ampelisca macrocephala*	26	0.84	81.87
28	*Philomedes orbicularis*	26	0.84	82.71
29	*Caprellinoides mayeri*	23	0.74	83.45

30	Nematode 3	23	0.74	84.19
31	Oligochaete 4	22	0.71	84.90
32	*Syllidia inermis*	21	0.68	85.58
33	Tanaid 11	20	0.64	86.22
34	*Scoloplos marginatus*	18	0.58	86.80
35	*Gammaropsis longicornis*	17	0.55	87.35
36	Gastropods (decalcified)	15	0.48	87.83
37	*Jasmineira caeca*	14	0.45	88.28
38	*Limatula hodgsoni*	12	0.39	88.67
39	*Echinozone spinosa*	11	0.35	89.02
40	*Exogone miniscula*	11	0.35	89.37
41	*Praxillella* sp.	11	0.35	89.72
42	*Monoculodes* cf. *abacus*	10	0.32	90.04
43	*Ammotrypane syringopyge*	9	0.29	90.33
44	*Asychis* sp.	9	0.29	90.62
45	*Glycera capitata*	9	0.29	90.91
46	*Paramunna rostrata*	8	0.26	91.17
47	*Kuphocheira setimanus*	8	0.26	91.43
48	*Syrrhoe* cf. *psychrophila*	8	0.26	91.69
49	*Tharyx* sp.	8	0.26	91.95
50	*Typosyllis brachychaeta*	8	0.26	92.21
51	*Uristes murrayi*	8	0.26	92.47
52	Archiannelid 38	7	0.22	92.69
53	*Schraderia* cf. *gracilis*	7	0.22	92.91
54	Solenogastre 3	7	0.22	93.13
55	*Travisia kerguelensis*	7	0.22	93.35
56	*Urothoe* sp. D	7	0.22	93.57
57	*Anaitides adarensis*	6	0.19	93.76
58	*Cyclocardia antarctica*	6	0.19	93.95
59	*Proboloides antarcticus*	6	0.19	94.14
60	*Terebellides stroemii*	6	0.19	94.33
61	*Yoldia eightsi*	6	0.19	94.52
62	*Achelia communis*	5	0.16	94.68
63	*Aglaophamus ornatus*	5	0.16	94.84
64	*Amphiura belgicae*	5	0.16	95.00
65	*Paramunna glacialis*	5	0.16	95.16
66	*Neojaera antarctica*	5	0.16	95.32
67	*Prostebbingia* cf. *gracilis*	5	0.16	95.48
68	*Austroraptus praecox*	4	0.13	95.61

69	*Campylaspis antarctica*	4	0.13	95.74
70	*Ectias* sp.	4	0.13	95.87
71	*Gammaropsis* sp. C	4	0.13	96.00
72	*Lepeta antarctica*	4	0.13	96.13
73	*Monoculodes scabriculosus*	4	0.13	96.26
74	*Neobuccinum eatoni*	4	0.13	96.39
75	*Nototanais antarcticus*	4	0.13	96.52
76	*Abatus* sp.	3	0.10	96.62
77	*Antarcturus furcatus*	3	0.10	96.72
78	*Atylopsis megalops*	3	0.10	96.82
79	*Axiothella quadrimaculata*	3	0.10	96.92
80	*Barrukia cristata*	3	0.10	97.02
81	*Branchiomma* sp. B	3	0.10	97.12
82	*Edwardsia* sp.	3	0.10	97.22
83	*Liljeborgia* cf. *georgiana*	3	0.10	97.32
84	*Munna* sp.	3	0.10	97.42
85	*Sterechinus neumayeri*	3	0.10	97.52
86	*Aeginoides gaussi*	2	0.064	97.58
87	*Ampharete kerguelensis*	2	0.064	97.65
88	*Cyclaspis gigas*	2	0.064	97.71
89	*Cymodoce antarctica*	2	0.064	97.78
90	*Empoulsenia antarctica*	2	0.064	97.84
91	*Eteone aurantiaca*	2	0.064	97.90
92	*Fabricia* sp.	2	0.064	97.97
93	*Gitanopsis inaequipes*	2	0.064	98.03
94	*Munna globicauda*	2	0.064	98.10
95	Nimertine 4	2	0.064	98.16
96	*Parepimeriella* sp.	2	0.064	98.22
97	*Pionosyllis comosa*	2	0.064	98.30
98	Podocopid 18	2	0.064	98.35
99	*Syllis amica*	2	0.064	98.42
100	Amphipod 172	1	0.032	98.45
101	*Austrofilius furcatus*	1	0.032	98.48
102	Cyclopoid 2	1	0.032	98.51
103	*Coulmannia* sp.	1	0.032	98.54
104	*Cylichnina gelida*	1	0.032	98.58
105	*Diastylis helleri*	1	0.032	98.61
106	*Epimeria inermis*	1	0.032	98.64
107	*Epimeria macrodonta*	1	0.032	98.67

108	*Euchone pallida*	1	0.032	98.70
109	*Eudorella gracilior*	1	0.032	98.74
110	*Eugerda* sp.	1	0.032	98.77
111	*Eulalia* sp. C	1	0.032	98.80
112	*Eurycope vicarius*	1	0.032	98.83
113	*Flabelligera gourdoni*	1	0.032	98.86
114	*Gammaropsis georgianus*	1	0.032	98.90
115	*Gondogeneia georgiana*	1	0.032	98.93
116	Harpacticoid 2	1	0.032	98.96
117	Hirudinean 1	1	0.032	98.99
118	*Iphimediella cyclogena*	1	0.032	99.02
119	*Iphimediella margueritei*	1	0.032	99.06
120	Isopod 25	1	0.032	99.09
121	Isopod 39	1	0.032	99.12
122	*Lanicides bilobata*	1	0.032	99.15
123	*Leptostylis crassicauda*	1	0.032	99.18
124	*Lumbrineris antarctica*	1	0.032	99.22
125	*Maxilliphimedia longipes*	1	0.032	99.25
126	*Notasellus australis*	1	0.032	99.28
127	*Ophionotus victoriae*	1	0.032	99.31
128	*Oradarea tricarinata*	1	0.032	99.34
129	*Oradarea unidentata*	1	0.032	99.38
130	*Oradarea* sp.	1	0.032	99.41
131	*Orchomene arnaudi*	1	0.032	99.44
132	*Orchomene* sp. B	1	0.032	99.47
133	*Orchomene* sp. C	1	0.032	99.50
134	*Paramoera* sp.	1	0.032	99.54
135	*Cyclocardia antarctica*	1	0.032	99.57
136	Bivalve 48	1	0.032	99.60
137	*Philine* sp.	1	0.032	99.63
138	*Philomedes assimilis*	1	0.032	99.66
139	*Pista godfroyi*	1	0.032	99.70
140	Syllid 163	1	0.032	99.73
141	*Pyura* sp.	1	0.032	99.76
142	*Rhodine loveni*	1	0.032	99.79
143	*Scalibregma inflatum*	1	0.032	99.82
144	*Schraderia* cf. *dubia*	1	0.032	99.86
145	*Scleroconcha gallardoi*	1	0.032	99.89

146	*Streblosoma bairdi antarctica*	1	0.032	99.92
147	*Thaumatelson herdmani*	1	0.032	99.95

The total number of species represented by samples CH 1 - CH 4 was 147 and the total number of individuals was 3102, which represents 7755/m^2.

CAPE BIRD, 77°S

Numerical Dominants

Although there are less than half as many species (72) in the Cape Bird samples as in the samples from Cape Hallett, the sampled population is over ten times (34 042 individuals) larger (Table 30). Twenty-eight percent of the species occur in all samples and these represent 94% of the individuals. Forty-five percent of the species occur in only one sample and represent 3% of the individuals.

The dominant species in the Cape Bird samples are the myodocopid ostracod *Philomedes heptathrix*, the burrowing anemone *Edwardsia* sp., and the tube building polychaete *Spiophanes tcherniai* (Table 26). These three species occur in every sample and make up 70% of the sampled population. The peracarid *Nototanais dimorphus* and Archiannelid 38 are also well distributed and very abundant in the samples. Other abundant species occurring in every sample include the isopods *Austrosignum glaciale* and *A. grande*, the cumacean *Eudorella splendida*, and the amphipods *Heterophoxus videns* and *Orchomene franklini*. Aside from *S. tcherniai* and Archiannelid 38 the only annelids well represented in the samples are the sedentary polychaetes *Tharyx* sp. and *Haploscoloplos kerguelensis*, and the oligochaete *Torodrilus lowryi*.

Component Groups

At Cape Bird the structure of the major component groups differs from other areas in this study (Table 27). Peracarids and myodocopid ostracods form a crustacean component which accounts for 39% of the sampled population. Together with the polychaete component they comprise 78% of the individuals. If the burrowing anemone *Edwardsia* sp. is included then the total becomes 97% of the individuals. Bivalves are insignificant, and along with nematodes, sipunculids, gastropods, and asteroid and ophiuroid echinoderms, make up the remaining 3% of the sampled population.

Table 26. Rank analysis of the summer macrobenthos at Cape Bird, Ross Island, based on numerical dominance and frequency of occurrence of the top 10 species in each sample.

		CB 1	CB 2	CB 3	CB 4	f	Score
1	*Philomedes heptathrix*	9	9	9	8	100	5832
2	*Edwardsia* sp.	10	8	8	9	100	5760
3	*Spiophanes tcherniai*	–	10	10	10	75	1000
4	*Nototanais dimorphus*	7	7	7	–	75	343
5	Archiannelid 38	8	–	5	6	75	240
6	*Austrosignum glaciale*	4	5	4	2	100	160
7	*Eudorella splendida*	2	–	6	5	75	60
8	*Heterophoxus videns*	–	3	3	3	75	27
9	*Orchomene franklini*	5	–	–	4	50	20
10	*Tharyx* sp.	6	–	2	–	50	12
11	Nauplius larvae	–	–	–	7	25	7
12	*Austrosignum grande*	3	2	1	1	100	6
13	*Philomedes assimilis*	–	6	–	–	25	6
14	*Haliacris antarctica*	–	4	–	–	25	4
15	*Haploscoloplos kerguelensis*	1	–	–	–	25	1
16	*Neoxenodice cryophile*	–	1	–	–	25	1

Table 27. Breakdown of the major groups comprising the summer macrobenthos at Cape Bird, Ross Island.

	Species		Individuals	
	No.	%	No.	%
Bivalvia	4	5.5%	162	0.5%
Peracarida	25	35.0%	6190	18.0%
Polychaeta	21	29.0%	13 199	39.0%
Total	50	69.0%	19 551	57.5%
Miscellaneous	22	30.5%	14 491	42.5%

Trophic Structure

At Cape Bird 54% of the population is comprised of suspension-feeders although they contribute only 18% of the species (Table 28). Bivalves are very scarce and only the widespread Antarctic pholadomyoid *Laternula elliptica* ($120/m^2$) is very common. Similarly the only suspension-feeding peracarid is the corophiid amphipod *Haplocheira* sp. ($158/m^2$). The main suspension-feeders are the polychaetes, but although the sabellid *Potamilla antarctica* ($135/m^2$) is present it is the spionid *Spiophanes tcherniai* ($27\ 358/m^2$) that dominates the population. Its position of third in the rank analysis is due to low numbers at CB 1 (Table 26). The only other abundant suspension-feeder at Cape Bird is the burrowing actinarian *Edwardsia* sp. ($15\ 043/m^2$) which comprises 35% of the population and is second in the rank analysis.

Deposit-feeders make up 45% of the population and 65% of the species (Table 28), and form the diverse part of the Cape Bird community. Bivalves make up less than one percent of the deposit-feeders and are represented only by *Yoldia eightsi* ($235/m^2$). Peracarids are much more conspicuous with 58% of the species and 40% of the population. At least three species of cumaceans are present in the community, but only the leuconid *Eudorella splendida* ($1938/m^2$) and the diastylid *Diastylis helleri* ($250/m^2$) are common. The most abundant deposit-feeding peracarid at Cape Bird is the paratanaid *Nototanais dimorphus* ($5285/m^2$). Isopods are diverse and the two munnids *Austrosignum glaciale* ($2130/m^2$) and *A. grande*

Table 28. Trophic structure of the summer macrobenthos at Cape Bird, Ross Island, based on 68% of the species and 93% of the individuals (see Appendix II for detailed breakdown of trophic structure).

	Species	%	Individuals	%
Suspension-feeders	9	18%	17 178	54%
Deposit-feeders	32	65%	14 179	45%
Remainder (Omnivores, Carnivores, Scavengers)	8	16%	180	1%
Suspension-feeders				
Bivalvia	2	22%	62	<1%
Peracarida	1	11%	63	<1%
Polychaeta	3	33%	11 002	64%
Miscellaneous	3	33%	6051	35%
Deposit-feeders				
Bivalvia	1	3%	94	1%
Peracarida	19	58%	5726	40%
Polychaeta	6	18%	766	5%
Miscellaneous	7	21%	7593	54%
Remainder (Omnivores, Carnivores, Scavengers)				
Peracarida	1	12%	156	86%
Polychaeta	5	63%	22	12%
Miscellaneous	2	25%	2	1%

($1278/m^2$) are very common. Amphipods are the most diverse peracarid group with six families, eight genera, and nine species. The most common species are the phoxocephalid *Heterophoxus videns* ($1445/m^2$) and the lysianassid *Orchomene franklini* ($1128/m^2$). The corophiid *Gammaropsis longicornis* ($325/m^2$) and the oedicerotid *Monoculodes* sp. ($223/m^2$) are also common. Polychaetes are represented by only four families, and six genera and species. The Maldanidae is the only family with more than one species and only two *Praxillella kerguelensis* ($323/m^2$) and Maldanid 125 ($188/m^2$) are common. The cirratulid *Tharyx* sp. ($935/m^2$) and the orbiniid *Haploscoloplos kerguelensis* ($445/m^2$) are the only other common deposit-feeding polychaetes. The oligochaete *Torodrilus lowryi* ($460/m^2$) is a common worm in the Cape Bird community as it was in Arthur Harbour and in Moubray Bay. At Cape Bird the myodocopid ostracod family Philomedidae is represented by three species of which *Philomedes heptathrix* ($16\ 958/m^2$) is extraordinarily abundant. *P. assimilis* ($898/m^2$) is also abundant compared with other deposit-feeders in the community, but the larger *P. orbicularis* ($113/m^2$) is not so common.

Among the remaining feeding types the peracarid amphipod *Neoxenodice cryophile* ($390/m^2$) is again common, but although the polychaetes are represented by five species in as many families, all are rare. The large nephtyid *Aglaophamus ornatus*, and the large polynoid *Barrukia cristata* are both present.

Species Diversity

Species diversity statistics from the Cape Bird samples characterize an extreme suspension-feeding community with low heterogeneity, richness, and equitability (Table 29). This description fits the community well when one considers that the samples contain only 73 species, that the size of the macrobenthic population is in the order of $85\ 000/m^2$, and that three species represent 71% of the total sampled population.

Table 29. Species diversity statistics for the summer macrobenthos at Cape Bird, Ross Island.

	Species heterogeneity	Species richness	Species equitability
CB 1	2.70	3.53	0.54
CB 2	2.70	5.24	0.48
CB 3	2.93	4.46	0.54
CB 4	3.19	4.06	0.62

Table 30. Structure of the summer macrobenthic community at Cape Bird, Ross Island, based on the accumulated totals of samples CB 1 - CB 4. Species are listed in order of abundance.

Rank	Species	Individuals	Percent fauna	Cumulative percent fauna
1	*Spiophanes tcherniai*	10 943	32.14	32.14
2	*Philomedes heptathrix*	6783	19.92	52.06
3	*Edwardsia* sp.	6017	17.68	69.74
4	*Nototanais dimorphus*	2114	6.21	75.95
5	Archiannelid 38	1326	3.90	79.85
6	*Austrosignum glaciale*	852	2.50	82.35
7	*Eudorella splendida*	775	2.28	84.63
8	*Heterophoxus videns*	578	1.70	86.33
9	*Austrosignum grande*	511	1.50	87.83
10	Nauplius larvae	486	1.43	89.26
11	*Orchomene franklini*	451	1.32	90.58
12	*Tharyx* sp.	374	1.10	91.68
13	*Philomedes assimilis*	359	1.05	92.73
14	*Haliacris antarctica*	240	0.70	93.43
15	*Torodrilus lowryi*	184	0.54	93.97
16	*Subonoba* spp.	180	0.53	94.50
17	*Haploscoloplos kerguelensis*	178	0.52	95.02
18	*Neoxenodice cryophile*	156	0.46	95.48
19	*Gammaropsis longicornis*	130	0.38	95.86
20	*Praxillella kerguelensis*	129	0.38	96.24
21	*Golfingia andersonni*	109	0.32	96.56
22	Oligochaete 4	102	0.30	96.86
23	*Diastylis helleri*	100	0.29	97.15
24	*Leptosomatum australe*	96	0.28	97.43
25	*Yoldia eightsi*	94	0.28	97.71
26	*Monoculodes* sp.	89	0.26	97.97
27	Isocirrus sp.	81	0.24	98.21
28	Maldanid 125	75	0.22	98.43
29	*Haplocheira* sp.	63	0.18	98.61

30	*Potamilla antarctica*	54	0.16	98.77
31	*Proboloides typicus*	50	0.15	98.92
32	*Laternula elliptica*	48	0.14	99.06
33	*Philomedes orbicularis*	46	0.14	99.20
34	*Abatus* sp.	25	0.07	99.27
35	*Orchomene penguides*	24	0.07	99.34
36	*Notoxenus spinifer*	23	0.07	99.41
37	*Empoulsenia antarctica*	22	0.06	99.47
38	*Oradarea rossi*	18	0.05	99.52
39	Harpacticoid 3	16	0.05	99.57
40	Bivalve 36	14	0.04	99.61
41	*Clavularia frankliniana*	12	0.03	99.64
42	*Amphiura algida*	11	0.03	99.67
43	*Priapulus tuberculatospinosus*	11	0.03	99.70
44	*Scleroconcha gallardoi*	11	0.03	99.73
45	Podocopid 6	10	0.03	99.76
46	*Axiothella* sp. A	6	0.02	99.78
47	*Eulagisca corrientis*	6	0.02	99.80
48	*Syllidia inermis*	6	0.02	99.82
49	Bivalve 35	6	0.02	99.84
50	*Aglaophamus ornatus*	5	0.02	99.86
51	*Philine* sp.	5	0.02	99.88
52	*Spiophanes* sp. B	5	0.02	99.90
53	*Barrukia cristata*	4	0.01	99.91
54	*Hippomedon macrocephalus*	4	0.01	99.92
55	*Leodora perrieri*	4	0.01	99.93
56	*Diastylis* sp. B	3	0.01	99.94
57	*Ampelisca* sp. (Juv.)	2	0.01	99.95
58	*Paramunna glacialis*	2	0.01	99.96
59	*Antias charcoti*	1	0.003	99.96
60	*Eusirus antarcticus*	1	0.003	99.97
61	*Gnathia antarctica*	1	0.003	99.97
62	*Grubianella* sp.	1	0.003	99.97
63	Isopod 25	1	0.003	99.97
64	*Lumbrineris magalhaensis*	1	0.003	99.98
65	*Micronephtys* sp.	1	0.003	99.98
66	*Neobuccinum eatoni*	1	0.003	99.98
67	*Odontaster validus*	1	0.003	99.99
68	*Oediceroides calmani*	1	0.003	99.99

69	*Pista* cf. *abyssicola*	1	0.003	99.99
70	*Anobothrus* sp.	1	0.003	100.00
71	*Sclerocheilus* sp.	1	0.003	100.00
72	*Spio obtusa*	1	0.003	100.00

The total number of species represented by samples CB 1 - CB 4 was 72 and the total number of individuals was 34 042, which represents 85 105/m^2.

HURLBERT'S ANALYSIS

Hurlbert (1971) pointed out that "multispecific collections of organisms ... are not intrinsically arrangeable in linear order along some diversity scale". At the same time he felt that it would be very useful to be able to compare collections of different sizes directly. Given samples A and B in which N_A is larger than N_B one way to compare the samples directly would be to resample A and get a new sample size equal to N_B. But instead of physically resampling an area Hurlbert suggested a method which mathematically resamples the larger sample and computes the expected number of species that would be found if N_B individuals were taken from sample A. The method is based on the assumption that all individuals in the collection are independently distributed, and is represented by the following formula:

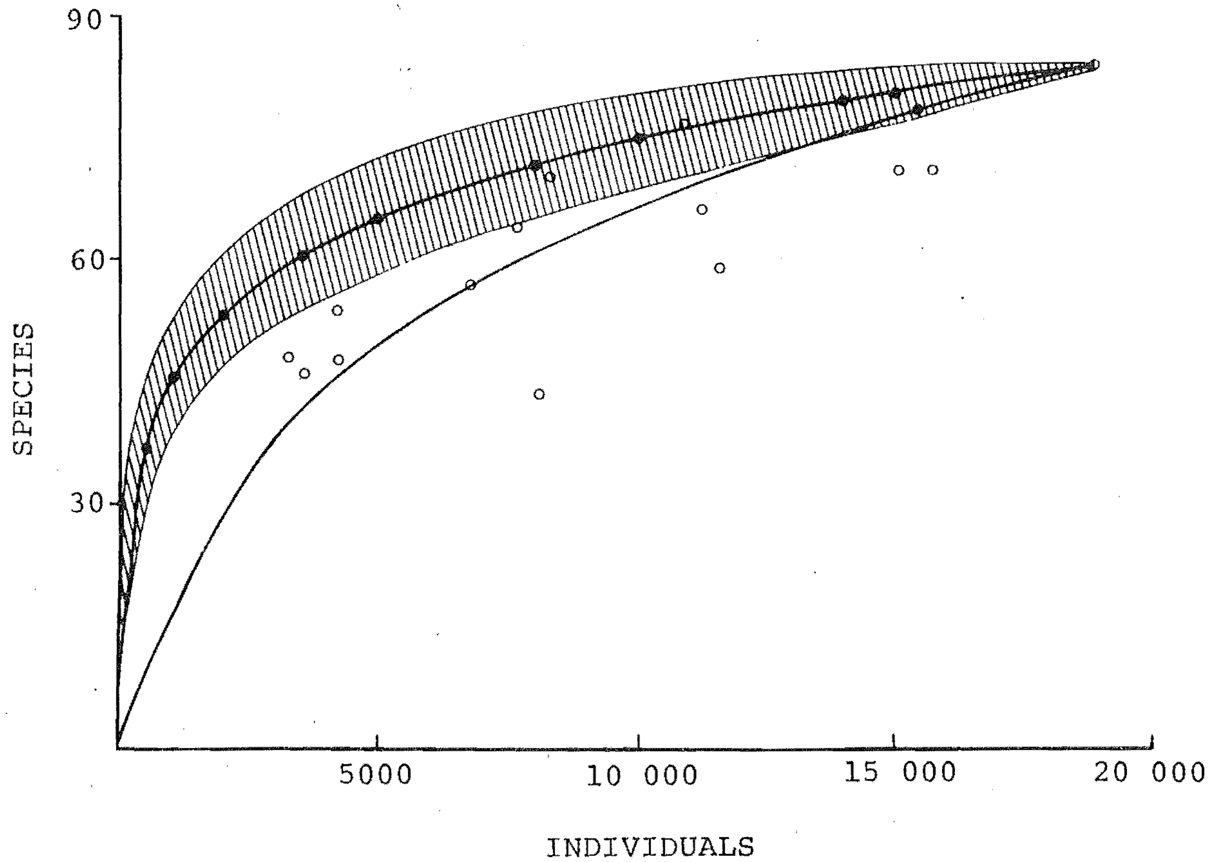
$$E(S_n) = \sum_{i=1}^{s} \left\{ 1 - \left| \binom{N - N_i}{n} \quad \binom{N}{n} \right| \right\}$$

where $E(S_n)$ is the expected number of species in a random sample of n individuals taken from a sampled population of N individuals and S species. N_i is the number of individuals in the i^{th} species.

The data from each station in this study were analyzed by this method and plotted with the aim of comparing richness curves along the latitudinal gradient. The combined grab samples from each station were analyzed and a curve was generated as shown in figure 18. The curve [n vs. $E(S_n)$] constitutes a large sample with a number of smaller theoretical samples plotted along its length. However, when the four original grab samples, plus combinations thereof, were plotted on the graph they consistently fell below the predicted richness curve. Standard deviation was calculated for each point on the curve according to the formula:

$$S(S_n) = \sqrt{[S - E(S_n)][1 - S + E(S_n)] + \sum_{\substack{i \neq j \\ i,j=1,S}} \binom{N - N_i - N_j}{n} \quad \binom{N}{n}}$$

Figure 18. Hurlbert's richness curve (●—●) for the Auckland Islands macrobenthic community. Crosshatched envelope illustrates the standard deviation at 99% confidence limits. Empirical richness curve (○—○).


90
60
30
SPECIES
5000
10 000
15 000
20 000
INDIVIDUALS

In the Auckland Islands samples (figure 18) Hurlbert's formula estimated that a sample size of 3478 individuals, such as found at AH 2, would have an expected number of species in the range from 53 to 67, using 99% confidence limits. The actual number of species is 48 which is five standard deviations from the expected, a situation which is highly unlikely to occur. Most of the empirical points on this graph fall below Hurlbert's curve and outside the 99% confidence limits. Table 31 indicates that a large number of actual samples vary significantly from the expected number of species using Hurlbert's formula, and in all of these cases the model over-estimates the actual value.

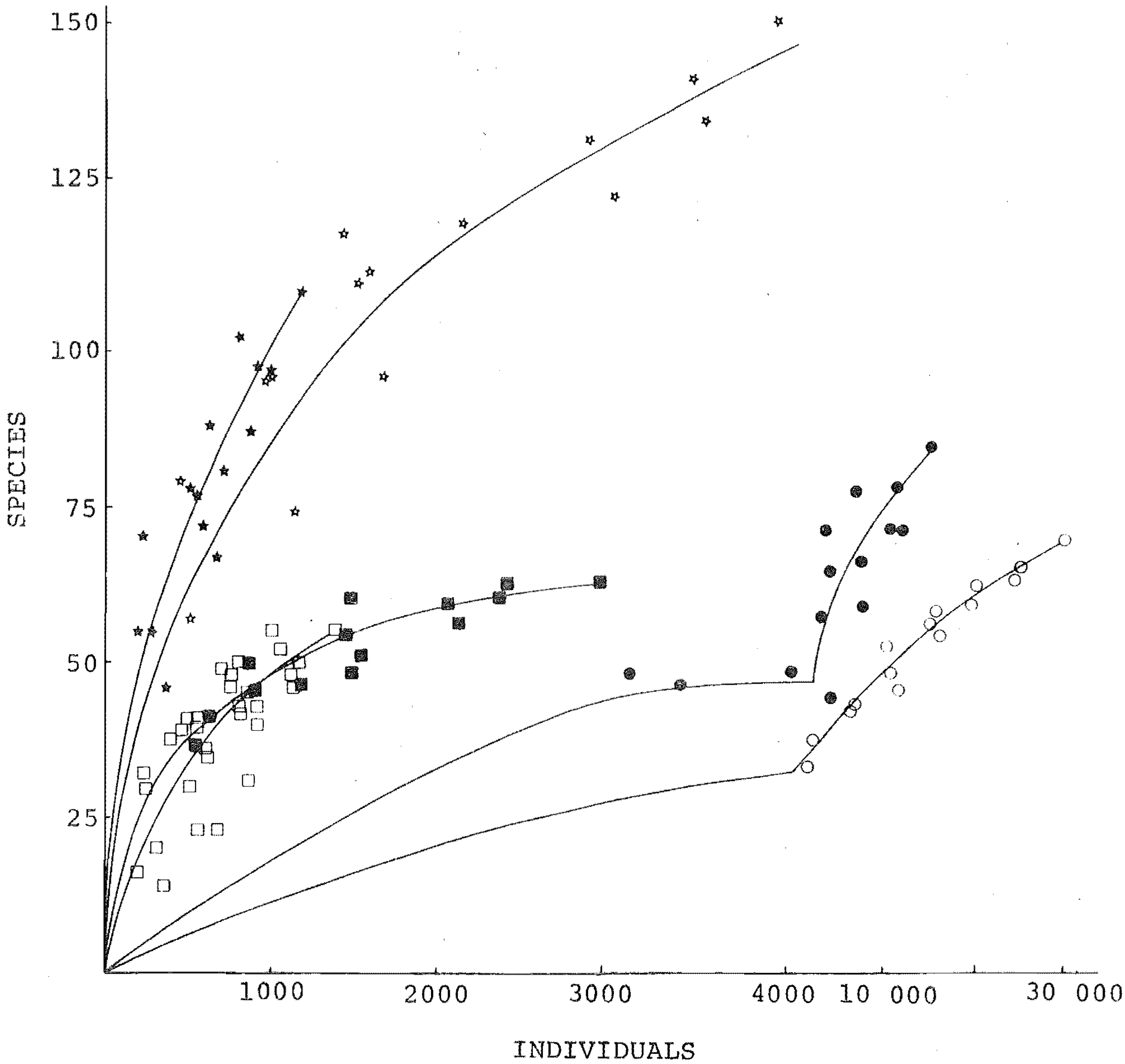
Because the samples cannot be linearly ordered Hurlbert recommended not reducing them to a common size, but rather comparing curves from different collections to give a visual impression of species richness. However, the fact that so many of the actual grab values fall outside the 99% range indicates that Hurlbert's basic assumption concerning independent distribution of species may be faulty. His formula consistently over-estimates the number of expected species and this may be attributed to clumping and possibly to samples which are not species saturated. Hurlbert's formula assumes that the species asymtote has been reached so that in an actual sample which is undersaturated the Hurlbert curve will over-estimate the number of species near the smaller end. In addition when clumping occurs Hurlbert's formula over-estimates the expected number of species because it assumes independent distribution. Since clumping did occur in my samples and Hurlbert consistently over-estimated expected species, this method was rejected as a means of comparing species richness along the latitudinal transect.

Nonetheless, richness curves as suggested by Sanders (1968) and Hurlbert (1971) are still an appealing approach to visually comparing species richness of communities. The series of curves in figure 19 are empirical curves generated by combining the original four samples from each station in all possible combinations. This is not a model, but rather an empirical method which utilizes the information in the samples in all possible ways. When the curves are compared with each other they give a similar visual impression as Hurlbert's curves, but because they are using actual data they are considered more realistic. If the stations with higher curves are considered richer than ones with lower curves then they compare well with the

Table 31. Comparison of expected number of species with actual number of species based on Hurlbert's formula and numbers of species in actual grab samples.

Location	No. individuals	Expected no. species 99% range	Actual no. species	* Values outside 99% range
Port Pegasus				
PP 1	210	50-60	55	
PP 2	286	56-70	55	
PP 3	340	62-74	72	
PP 4	369	62-74	46	*
Auckland Islands				
AI 1	3185	53-67	48	*
AI 2	3478	53-67	46	*
AI 3	8033	65-78	44	*
AI 4	4151	56-70	48	*
Perseverance Harbour				
PH 1	246	27-39	32	
PH 2	256	28-40	30	
PH 3	208	26-38	16	*
PH 4	309	30-42	20	*
PH 5	361	-	15	-
Cape Hallett				
CH 1	1144	98-120	74	*
CH 2	999	104-115	96	*
CH 3	521	70-92	60	*
CH 4	443	65-87	79	*
Cape Bird				
CB 1	4857	52-64	33	*
CB 2	13 988	49-61	52	
CB 3	9767	43-55	42	*
CB 4	5505	42-54	37	*

Figure 19. Empirical richness curve for each macrobenthic community along the transect between southern New Zealand and McMurdo Sound. Port Pegasus, Stewart Island, 47°S (✶ ✶); Waterfall Inlet and Sandy Bay, Auckland Islands, 50°S (● ◍); Perseverance Harbour, Campbell Island, 52°S (□ □); Arthur Harbour, Anvers Island, 64°S (▩ ▩); Moubray Bay, Cape Hallett, 72°S (☆ ☆); Cape Bird, Ross Island, 77°S (○ ○).


150
125
100
75
50
25
SPECIES
1000
2000
3000
4000
10 000
30 000
INDIVIDUALS

results obtained using Margalef's (1958) richness formula. In addition Port Pegasus and Cape Hallett appear very similar, as do Perseverance Harbour and Arthur Harbour, and the Auckland Islands and Cape Bird. This corresponds well with information in the diversity statistics discussed later.

DISCUSSION

SPECIES DIVERSITY OF THE SHALLOW WATER MACROBENTHOS BETWEEN 47°S AND 77°S LATITUDE: ITS RELATIONSHIP TO LATITUDE AND TO TROPHIC STRUCTURE

Species Diversity and Latitude

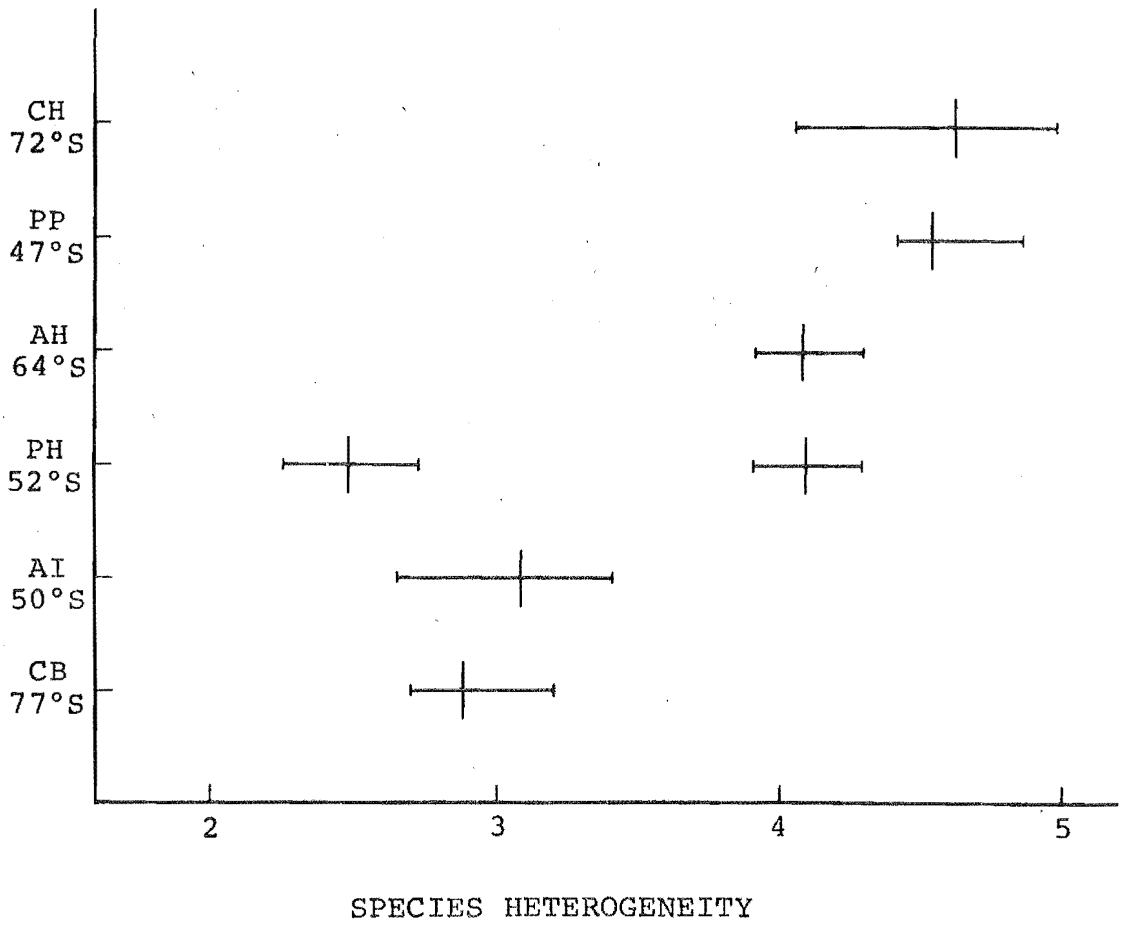
A comparison of species diversity between the macrobenthic communities along the latitudinal gradient between 47°S and 77°S indicates no correlation between diversity of the macrobenthos and latitude (figures 20-22). However, there are distinct diversity relationships along the gradient. The communities at Cape Hallett and in Port Pegasus have very similar heterogeneity (means, 4.6 and 4.5 respectively) and species richness (means, 11.2 and 9.0 respectively) (figures 20, 21). Heterogeneity for the western side of Arthur Harbour (mean, 4.1) and the eastern end of Perseverance Harbour (mean, 4.1) is identical. Species richness for these communities is also similar with means of 6.3 and 5.4 respectively. These means are lower than the preceding communities, but very close to that of the Auckland Islands. However, the similarity between the species richness of Perseverance Harbour and the Auckland Islands is only superficial. Heterogeneity and species richness from the eastern end of Perseverance Harbour are very low, indicating a gradient from a normal deposit-feeding community to a depauperate community.

The third distinct set of heterogeneity and species richness values occurs between the communities at the Auckland Islands (mean $H' = 3.1$, $R = 5.4$), and Cape Bird (mean $H' = 2.9$, $R = 4.3$). Species equitability clumps into two distinct groups (figure 22). Communities in the eastern end of Perseverance Harbour, Port Pegasus, Arthur Harbour, and Cape Hallett all have comparably high equitability, and the communities at the Auckland Islands and at Cape Bird have low equitability. The equitability in the western end of Perseverance Harbour is also low.

Macrobenthic communities with the highest species diversity occur at Cape Hallett, 72°S, and Port Pegasus, 47°S. Despite their wide geographic separation the communities have a very similar mixed suspension, deposit-feeding trophic structure. They occur on

Figure 20. Heterogeneity, ranges and means. Macrobenthic communities ranked by means along the latitudinal transect between southern New Zealand and McMurdo Sound. CH, 72°S: Moubray Bay, Cape Hallett (mean H' = 4.6); PP, 47°S: Port Pegasus, Stewart Island (mean H' = 4.5); AH, 64°S: Arthur Harbour, Anvers Island (mean H' = 4.1); PH, 52°S: Perseverance Harbour, Campbell Island (mean H' = 4.1 at eastern end of harbour, and mean H' = 2.3 at western end); AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands (mean H' = 3.1); CB, 77°S: Cape Bird, Ross Island (mean H' = 2.9).

Figure 21. Species richness, ranges and means. Macrobenthic communities ranked by means along the latitudinal transect between southern New Zealand and McMurdo Sound. CH, 72°S: Moubray Bay, Cape Hallett (mean R = 11.2); PP, 47°S: Port Pegasus, Stewart Island (mean R = 9.0); AH, 64°S: Arthur Harbour, Anvers Island (mean R = 6.3); PH, 52°S: Perseverance Harbour, Campbell Island (mean R = 5.4 at the eastern end of the harbour, and mean R = 2.8 at the western end); AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands (mean R = 5.4); CB, 77°S: Cape Bird, Ross Island (mean R = 4.3).


CH
72°S
PP
47°S
AH
64°S
PH
52°S
AI
50°S
CB
77°S
2
3
4
5
SPECIES HETEROGENEITY

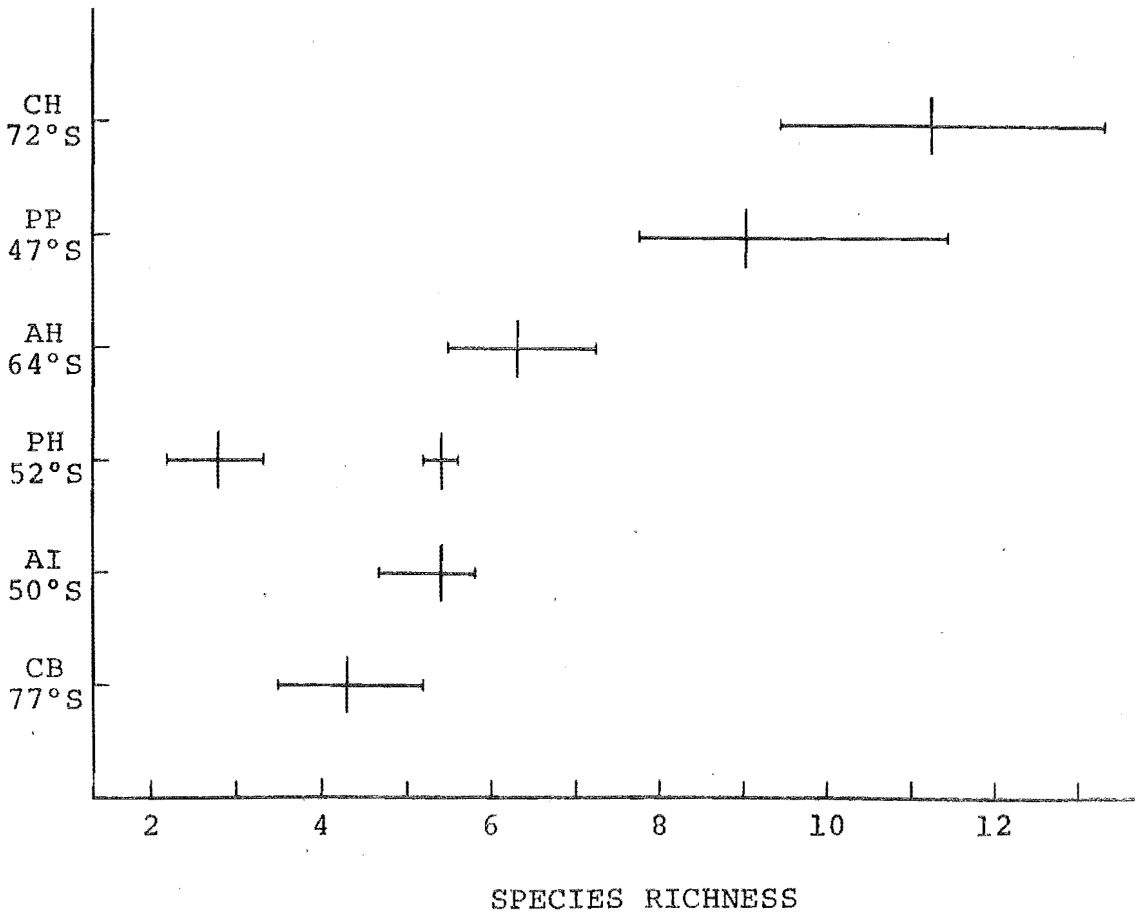
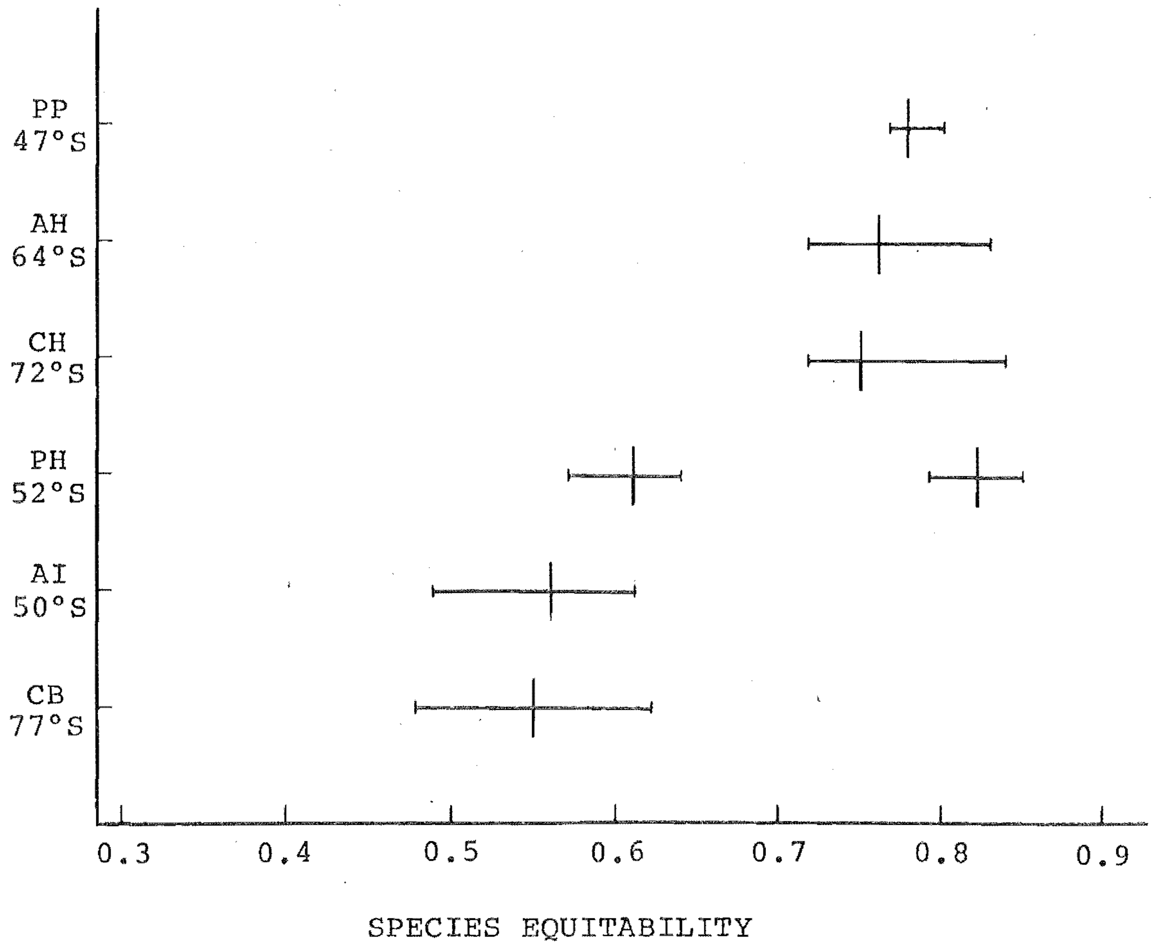

CH
72°S
PP
47°S
AH
64°S
PH
52°S
AI
50°S
CB
77°S
2
4
6
8
10
12
SPECIES RICHNESS

Figure 22. Species equitability, ranges and means. Macrobenthic communities ranked by means along the latitudinal gradient between southern New Zealand and McMurdo Sound. PP, 47°S: Port Pegasus, Stewart Island (mean $J' = 0.78$); AH, 64°S: Arthur Harbour, Anvers Island (mean $J' = 0.76$); CH, 72°S: Moubray Bay, Cape Hallett (mean $J' = 0.75$); PH, 52°S: Perseverance Harbour, Campbell Island (mean $J' = 0.82$ at the eastern end of harbour and mean $J' = 0.61$ at western end); AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands (mean $J' = 0.56$); CB, 77°S: Cape Bird, Ross Island (mean $J' = 0.55$).


PP
47°S
AH
64°S
CH
72°S
PH
52°S
AI
50°S
CB
77°S
0.3
0.4
0.5
0.6
0.7
0.8
0.9
SPECIES EQUITABILITY

silty-sand to sandy-silt bottoms. The macrobenthic communities with intermediate diversity are found in Arthur Harbour, 64°S, and Perseverance Harbour, 52°S, and both have a deposit-feeding trophic structure. The community in Arthur Harbour inhabits a sandy-mud bottom. The macrobenthic communities with lowest diversity occur at the Auckland Islands, 50°S, and at Cape Bird, 77°S, and both have a suspension-feeding trophic structure. These communities are found on predominantly sand bottoms.

Species Diversity and Trophic Structure:
Mixed Suspension, Deposit-Feeding Communities

The proportion of suspension-feeding and deposit-feeding animals in Port Pegasus is 33% and 55%, and at Cape Hallett it is 41% and 50%. Both of these communities are classified as mixed suspension, deposit-feeding communities. They have higher heterogeneity and species richness than any other communities in this study, and they also have high equitability values. This high diversity is due in part to the fact that communities with mixed basic trophic structures provide more niches and thereby support more different kinds of animals than other macrobenthic communities. But although these communities have similar ratios of basic trophic types and similar species diversity the taxa which compose this structure vary significantly (figures 23, 24, Appendix II).

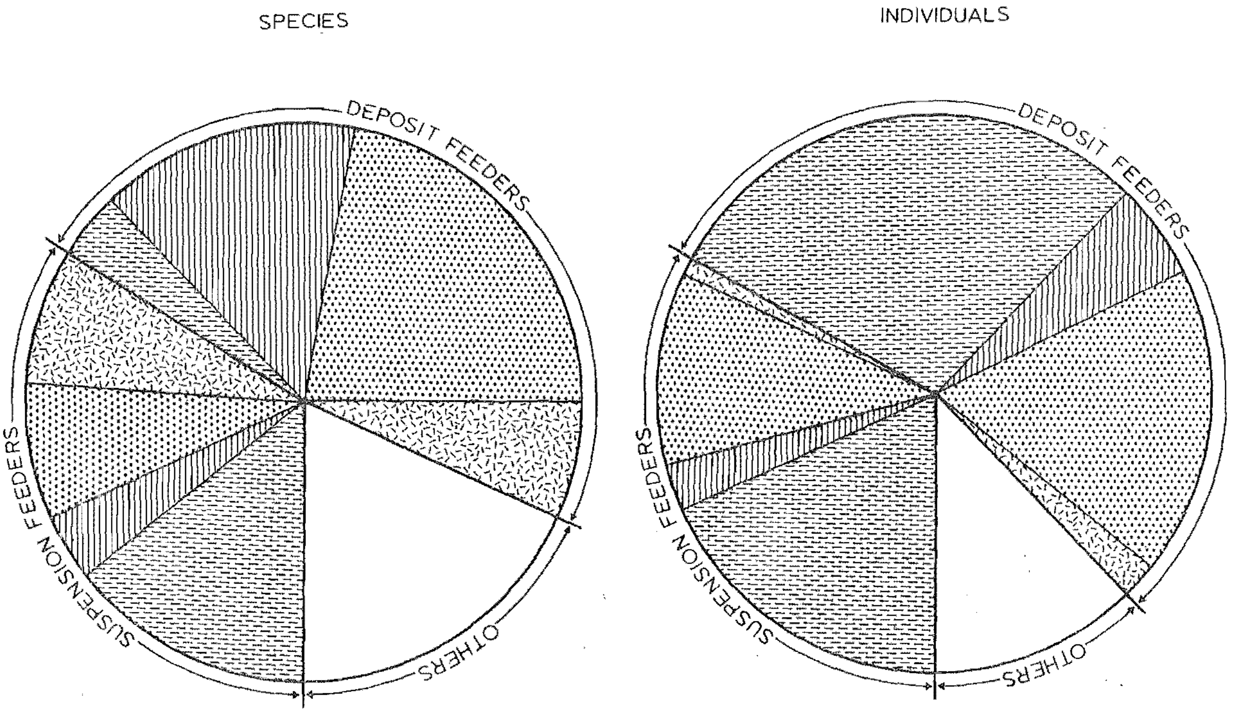
Bivalves are a very important part of the suspension-feeding (55%) and deposit-feeding (53%) populations in Port Pegasus, but at Cape Hallett they contribute only 14% of the suspension-feeding individuals and less than 1% of the deposit-feeders. The number of species drops in a similar manner. In Port Pegasus bivalves contribute 42% of the suspension-feeding species and 8% of the deposit-feeders. But at Cape Hallett they contribute 26% of the former and only 1% of the latter.

Deposit-feeding polychaetes contribute a similar proportion of species and individuals to both communities. In Port Pegasus they comprise 46% of the species and 33% of the individuals. At Cape Hallett they make up 31% of the species and 42% of the individuals. However, in the suspension-feeding component of the communities marked changes occur. In Port Pegasus, where bivalves are success-

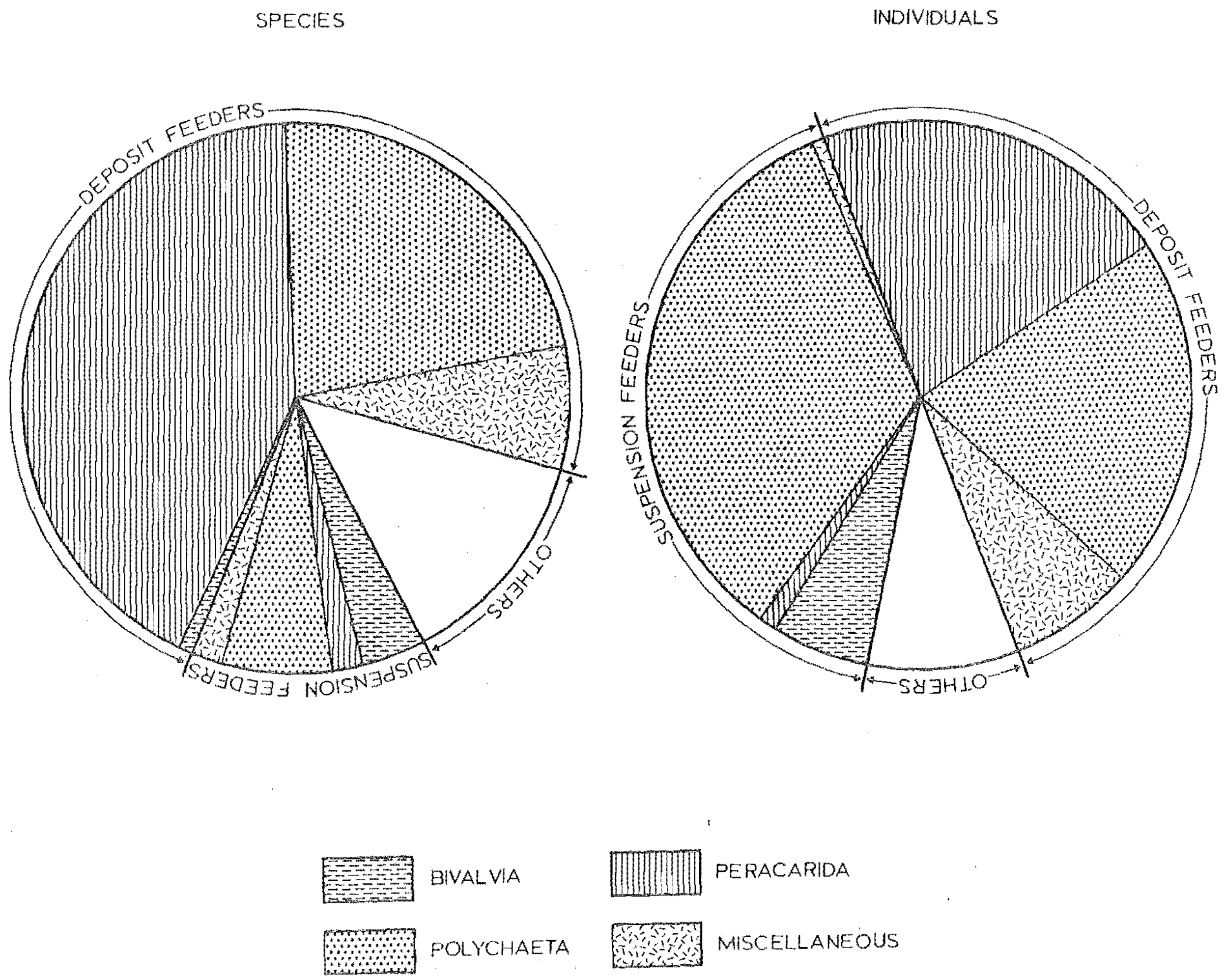
Figure 23. Trophic structure of the mixed suspension, deposit-feeding community in Port Pegasus, Stewart Island, based on percentage composition of species and individuals.

Figure 24. Trophic structure of the mixed suspension, deposit-feeding community in Moubray Bay, Cape Hallett, based on percentage composition of species and individuals.

PORT PEGASUS, 47°S



CAPE HALLETT, 72°S



ful, polychaetes comprise 23% of the species and 34% of the individuals. But at Cape Hallett, where bivalves are not successful, sabellid and spionid polychaetes have become the dominant suspension-feeders, and make up 47% of the species and 83% of the individuals.

Peracarids contribute a significant proportion of the deposit-feeding species (32%) in Port Pegasus, but they have a small number of individuals (10%). However, at Cape Hallett, where bivalves are almost absent, peracarids make up 58% of the deposit-feeding species and 43% of the individuals.

It thus appears that bivalves are an important part of the mixed suspension, deposit-feeding community in Port Pegasus, but further south at Cape Hallett they do not contribute substantially to the suspension or deposit-feeding components of the community. As a result the trophic structure of the polychaete and peracarid components is affected. In both areas polychaetes contribute similar proportions of species and individuals to the deposit-feeding component, but at Cape Hallett, where bivalves are unsuccessful, they dominate the suspension-feeding component of the community. In a complimentary fashion peracarids make up a significant proportion of the deposit-feeding component at Cape Hallett. But in Port Pegasus peracarids appear to be held down by the more successful bivalves. Groups such as oligochaetes, sipunculids, and ostracods are also more abundant in Moubray Bay. Nonetheless, despite these major changes in the compositional structure of the two communities their trophic structure and their species diversity are very similar.

Deposit-Feeding Communities

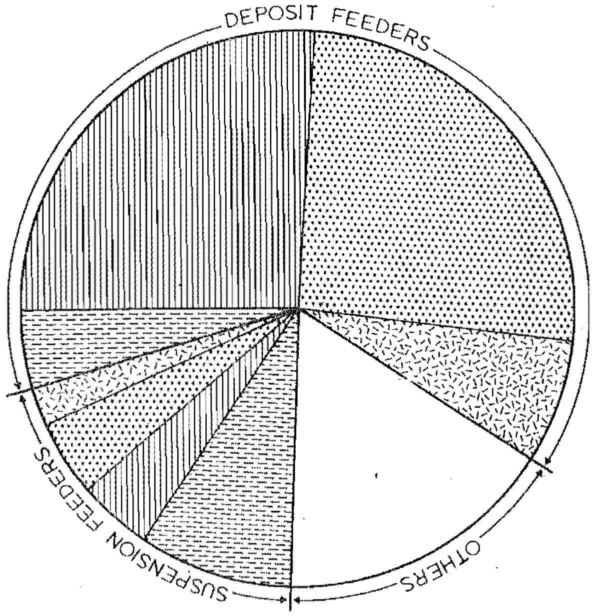
Deposit-feeding communities without a significant suspension-feeding component are simpler in structure and function and have lower heterogeneity and species richness than mixed suspension, deposit-feeding communities. In this study the communities in Perseverance Harbour, with 22% suspension-feeding and 74% deposit-feeding populations and in Arthur Harbour with 20% suspension-feeders and 79% deposit-feeders are considered deposit-feeding communities. These communities are only 12° apart latitudinally, and they show many similarities in diversity and compositional structure.

Figure 25. Trophic structure of the deposit-feeding community in Perseverance Harbour, Campbell Island, based on percentage composition of species and individuals.

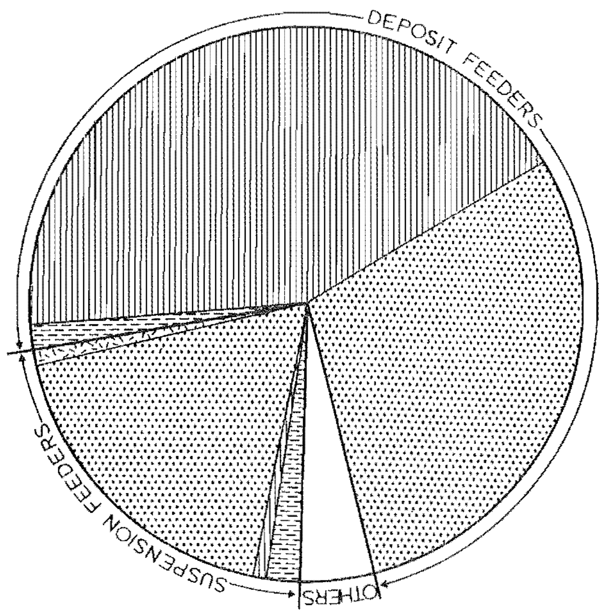
Figure 26. Trophic structure of the deposit-feeding community in Arthur Harbour, Anvers Island, based on percentage composition of species and individuals.

PERSEVERANCE HARBOUR, 52°S

SPECIES

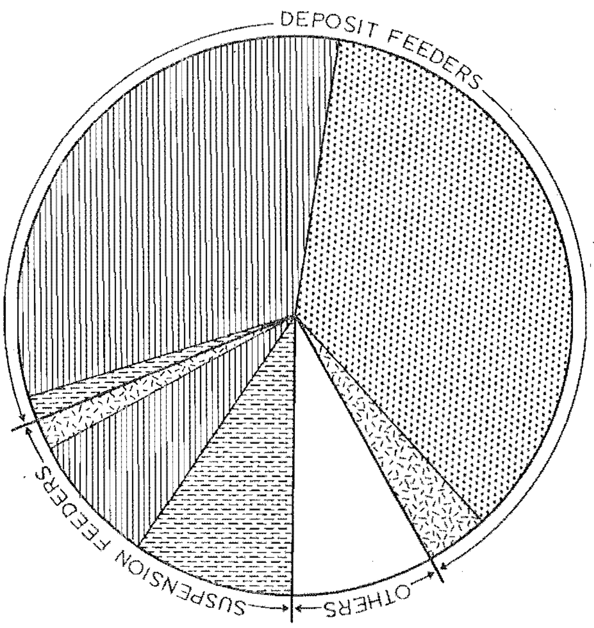


INDIVIDUALS

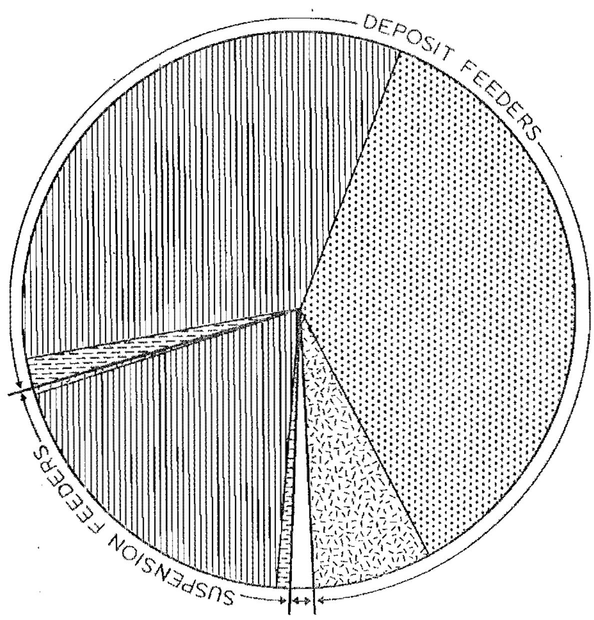


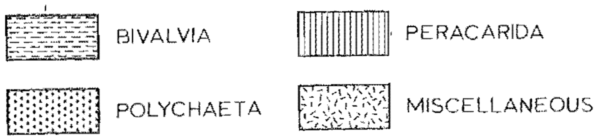
ARTHUR HARBOUR, 64°S

SPECIES



INDIVIDUALS





In both areas bivalves are an insignificant part of the deposit-feeding component (figures 25, 26) making up less than 7% of the species and 6% of the individuals in either area. Although bivalves comprise 44% of the species in Perseverance Harbour and 50% in Arthur Harbour they make up only 11% and 3% respectively of the suspension-feeding individuals. Suspension-feeding populations are dominated by a spionid polychaete (83%) in Perseverance Harbour and an ampeliscid amphipod (96%) in Arthur Harbour, neither of which is considered to be an obligate suspension-feeder.

Peracarids (41%, 44%) and polychaetes (41%, 49%) share species dominance of the deposit-feeding component in Perseverance Harbour and Arthur Harbour respectively. They also maintain similar proportions of individuals. Peracarids comprise 58% of the Perseverance Harbour deposit-feeders and 43% of the Arthur Harbour component while polychaetes make up 40% of the former and 46% of the latter.

Among the peracarids the amphipods are the most diverse group in either area and their composition and structure is very similar. Both areas have a similar number of species, 10 in Perseverance Harbour and 11 in Arthur Harbour, and similar populations, $1048/m^2$, and $1672/m^2$ respectively. In each area a corophiid, *Lembos* in Perseverance Harbour and *Gammaropsis* in Arthur Harbour, dominates the amphipods followed by phoxocephalids, *Proharpinia* and *Phoxocephalus* in Perseverance Harbour, and *Harpinia* and *Harpiniopsis* in Arthur Harbour. In each area the ratio of abundance of the top three species is very similar; 0.51 : 0.20 : 0.12 in Perseverance Harbour and 0.48 : 0.21 : 0.11 in Arthur Harbour.

This indicates very similar structural and functional roles played by the amphipod components in these two deposit-feeding communities. Polychaetes do not appear to follow these trends, although the Maldanidae is the most diverse family in each community.

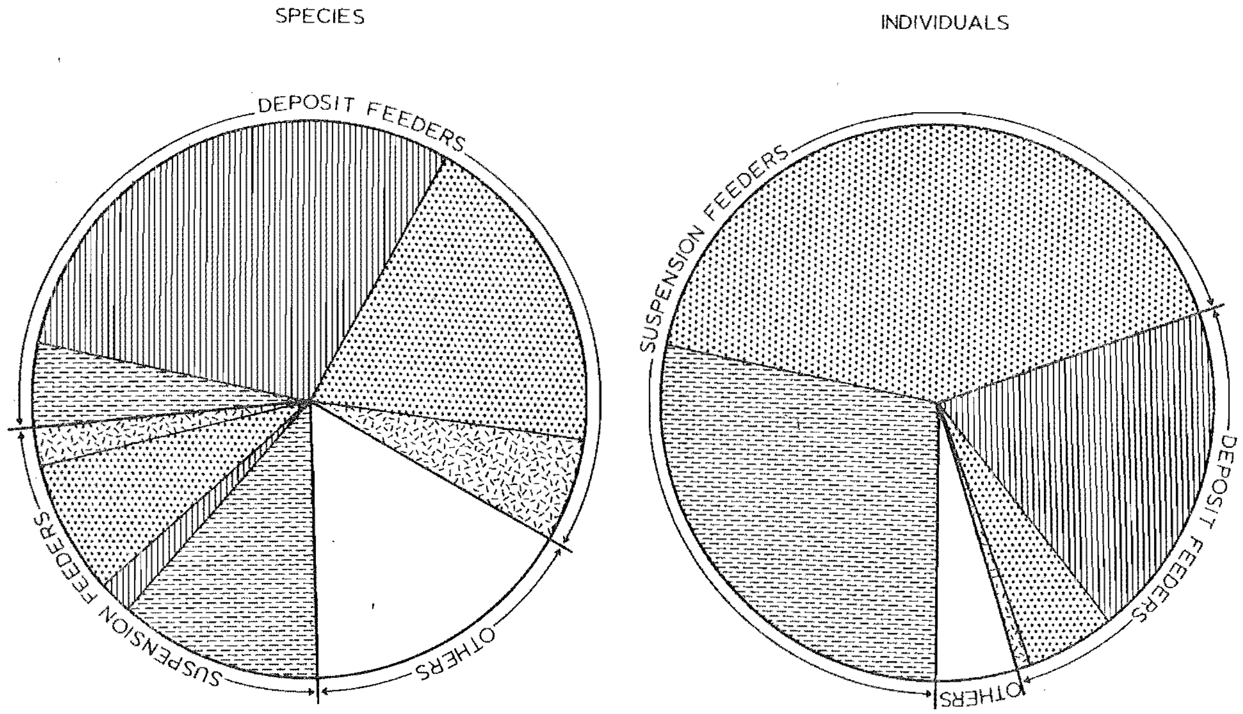
Suspension-Feeding Communities

The communities with the lowest species richness, species equitability, and heterogeneity are found at the Auckland Islands and at Cape Bird. In both of these areas over 50% of the individuals are suspension-feeders. This large component is maintained by less than 25% of the species in either area. Bivalves make up

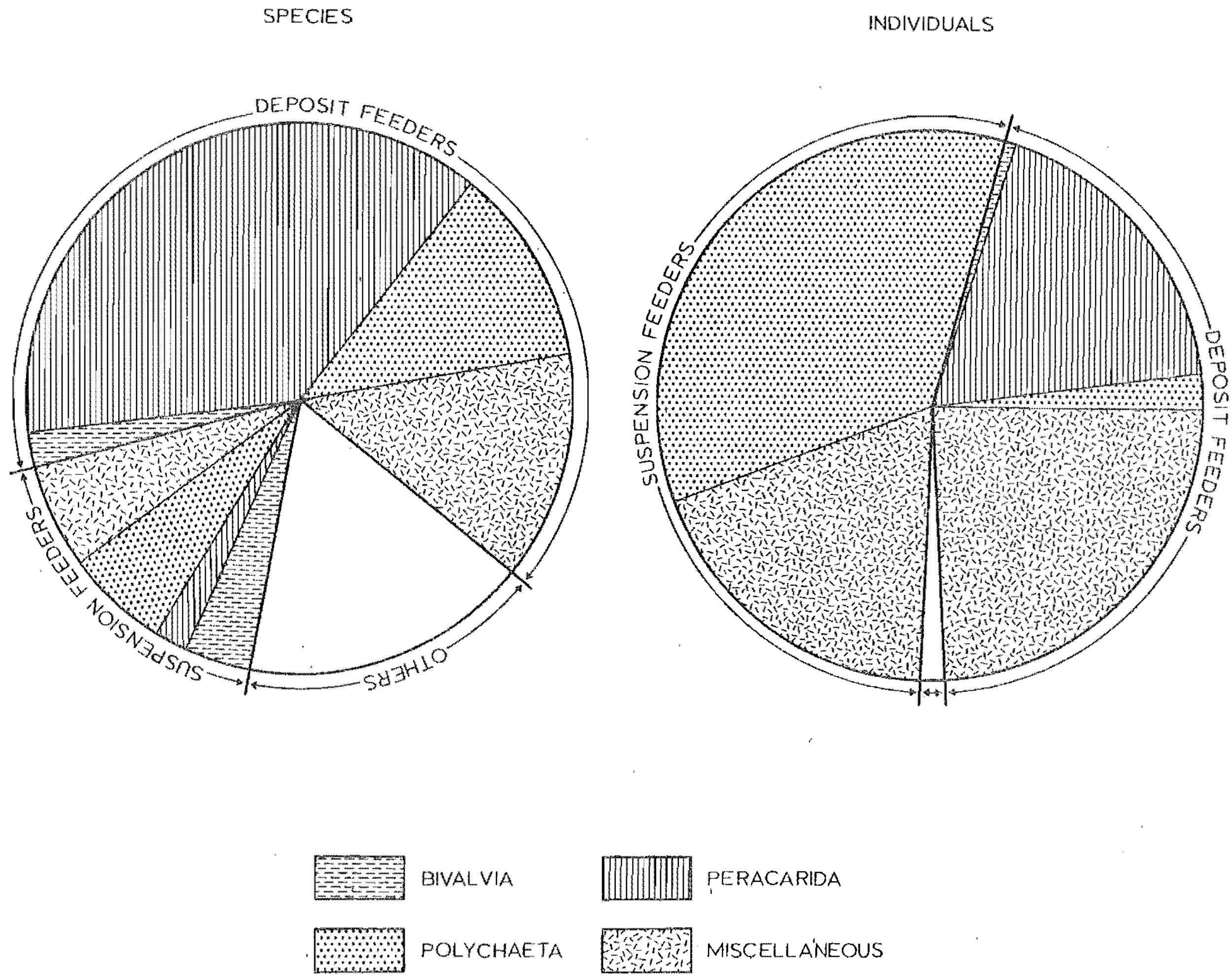
Figure 27. Trophic structure of the suspension-feeding community in Waterfall Inlet and Sandy Bay, Auckland Islands, based on percentage composition of species and individuals.

Figure 28. Trophic structure of the suspension-feeding community at Cape Bird, Ross Island, based on percentage composition of species and individuals.

AUCKLAND ISLANDS, 50°S



CAPE BIRD, 77°S



50% of the suspension-feeding species and 40% of the population at the Auckland Islands (figure 27). At Cape Bird they represent 22% of the species and less than 1% of the population (figure 28). Peracarids are represented by the corophiid genus *Haplocheira* in both areas, but the populations are less than 1%. Polychaetes make up the majority of the large population in each area. At the Auckland Islands they make up 33% of the species and 60% of the individuals. At Cape Bird they also comprise 33% of the species and 64% of the individuals. In both areas the dominant form is the cosmopolitan spionid genus *Spiophanes*. The densely packed tubes of *Spiophanes* form the structural skeleton of the community by trapping and stabilizing the sediment, and by providing a substrate for the large populations of surface deposit-feeders usually associated with suspension-feeding communities. The remainder of the suspension-feeding population at Cape Bird is comprised of the very abundant actinarian *Edwardsia*, which makes up 35% of the individuals. *Edwardsia* may be filling a niche left vacant by the absence of successful suspension-feeding bivalves in the Ross Sea.

Associated with these enormous suspension-feeding populations are large deposit-feeding populations. Peracarids (50%) and polychaetes (32%) make up the majority of deposit-feeding species at the Auckland Islands. Bivalves contribute only 8% of the species. At Cape Bird peracarids (58%) and polychaetes (18%) again contribute a majority of the deposit-feeding species. Seventy-six percent of the deposit-feeding individuals at the Auckland Islands are peracarids and 21% are polychaetes. At Cape Bird peracarids make up 40% of the deposit-feeders, but polychaetes make up only 6%, and the remainder of the deposit-feeding component (54%) is made up of myodocopid ostracods. The deposit-feeding component contributes species richness and a degree of evenness to the communities, but it also lacks species and the population is dominated by a few very abundant species.

The tubes of *Spiophanes* penetrate the top few centimetres of surface sediment and because they are so densely packed may act as a mechanical barrier which effectively excludes actively burrowing species. At Cape Bird where *Spiophanes tcherniai* is densely packed the only abundant actively burrowing polychaete is *Haplo-scoloplos kerguelensis*. The most abundant polychaetes are surface deposit-feeders such as the Maldanidae and the Cirratulidae. At the Auckland Islands where *Spiophanes* is less than half as abundant, capitellids and opheliids are more numerous, but maldanids and cirratulids are still the most abundant polychaetes. Woodin (1974) in an elegant series of experiments found that tube building polychaetes do reduce the abundance of burrowing polychaetes. Animals best adapted for living among this maze of tubes are actively moving surface deposit-feeders such as tanaidaceans, cumaceans, amphipods, and ostracods. At Cape Bird the ostracods, particularly *Philomedes heptathrix*, are the most abundant deposit-feeders (figure 28) making up over 50% of the population. However, peracarids still make up a significant part of the deposit-feeders at Cape Bird and it is the polychaetes which become less important deposit-feeders as the suspension-feeding part of the community increases. At the Auckland Islands and at Cape Bird the tanaidaceans *Anatanais novaezealandiae* and *Nototanais dimorphus* are the most abundant peracarids in their respective communities. Similarly the cumaceans *Diastylis neozelanica* and *Eudorella splendida* are the second and third most abundant peracarids. The isopod *Austrosignum glaciale* is the second most abundant peracarid at Cape Bird and isopods are more diverse and abundant there than at the Auckland Islands. Amphipods appear to be the deposit-feeding group least affected by large population increases. Although amphipods are not as diverse at Cape Bird as they are at the Auckland Islands they are twice as abundant. The top three species from both areas occur in the Phoxocephalidae, Corophiidae, and Lysianassidae. These similarities become more pronounced by comparing the deposit-feeding amphipod segments from the Antarctic communities and the Subantarctic communities. At both Cape Bird and Cape Hallett three of the top four species are the same, *Heterophoxus videns*, *Orchomene franklini*, and *Gammaropsis longicornis*. The abundant phoxocephalid *Metaphoxus* sp. was not found at Cape Bird, but the next most abundant genus in both areas is *Monoculodes*. The similarity between the Auckland Islands and its nearest neighbour, Campbell Island, is just as pronounced. The corophiid *Lembos* sp. 2 is the most abundant amphipod in both communities followed by the phoxocephalids *Paraphoxus* sp. at the Auckland Islands and *Proharpinia hurleyi* in Perseverance Harbour. The lysianassid *Parawaldeckia* sp. appears to be absent in Perseverance Harbour, but the next most abundant amphipod in both areas is

Phoxocephalus regium. A species of *Tiron* is absent from Perseverance Harbour but the next most abundant species in both areas is *Urothoe* sp. B and *Bathymedon* sp. The population levels of these species in both areas are very similar as are the ratios of abundance between ranked species. At the Auckland Islands the ratio of abundance between the top three amphipod species is; 0.46 : 0.16 : 0.12, and in Perseverance Harbour; 0.51 : 0.20 : 0.12. These results again indicate a similarity in structure and function of the amphipod component of the macrobenthos which is similar from one community to another, and is somewhat independent of the basic feeding structure of the community. In all of the areas mentioned above one species of the corophiid genera *Gammaropsis* or *Lembos* is always among the top four deposit-feeding amphipods. One species of lysianassid, either a *Parawaldeckia* in the Subantarctic or an *Orchomene* in the Antarctic is usually present. At least two species of phoxocephalids are usually present, represented in the Subantarctic by the genera *Paraphoxus*, *Phoxocephalus*, or *Proharpinia*, and in the Antarctic by the genera *Harpinia*, *Harpiniopsis*, *Heterophoxus*, or *Metaphoxus*. Oedicerotids are represented in the New Zealand Subantarctic by the genus *Bathymedon* and on the Antarctic shelf mainly by the genus *Monoculodes*. The ubiquitous Southern Ocean haustoriid genus *Urothoe* was found in every area sampled but Cape Bird. The only area which does not follow these trends is Port Pegasus where the amphipod component appears to be suppressed by the deposit-feeding bivalves. Port Pegasus has a different structural composition from communities farther south, which is based on a much stronger role played by bivalve molluscs. This bivalve influence appears to change the structure of the amphipod component considerably.

At this stage it is important to consider the original premise. Does diversity of the shallow water macrobenthos change along the latitudinal gradient between southern New Zealand and the Ross Sea? The conclusions which can be drawn from this study are: 1. There is not an even or a stepwise gradation from higher macrobenthic diversity at the lower latitudes to lower macrobenthic diversity at higher latitudes. 2. The changes in diversity which do occur are better correlated with the basic feeding structure of the communities. 3. The communities with the highest diversity occur in Moubray Bay and in Port Pegasus, and both are mixed suspension, deposit-feeding communities. The communities with the next highest diversity are found in the eastern end of Perseverance Harbour and in Arthur Harbour, and both are deposit-feeding communities. Lowest diversity occurs in the communities at Cape Bird and at the Auckland Islands, both of which are suspension-feeding communities.

4. The compositional and population structure of the amphipod component on the Campbell Plateau and on the Antarctic shelf shallow water macrobenthos is very similar.

COMPOSITIONAL STRUCTURE OF THE SHALLOW WATER MACROBENTHOS BETWEEN 47°S AND 77°S LATITUDE: ITS RELATIONSHIP TO LATITUDE

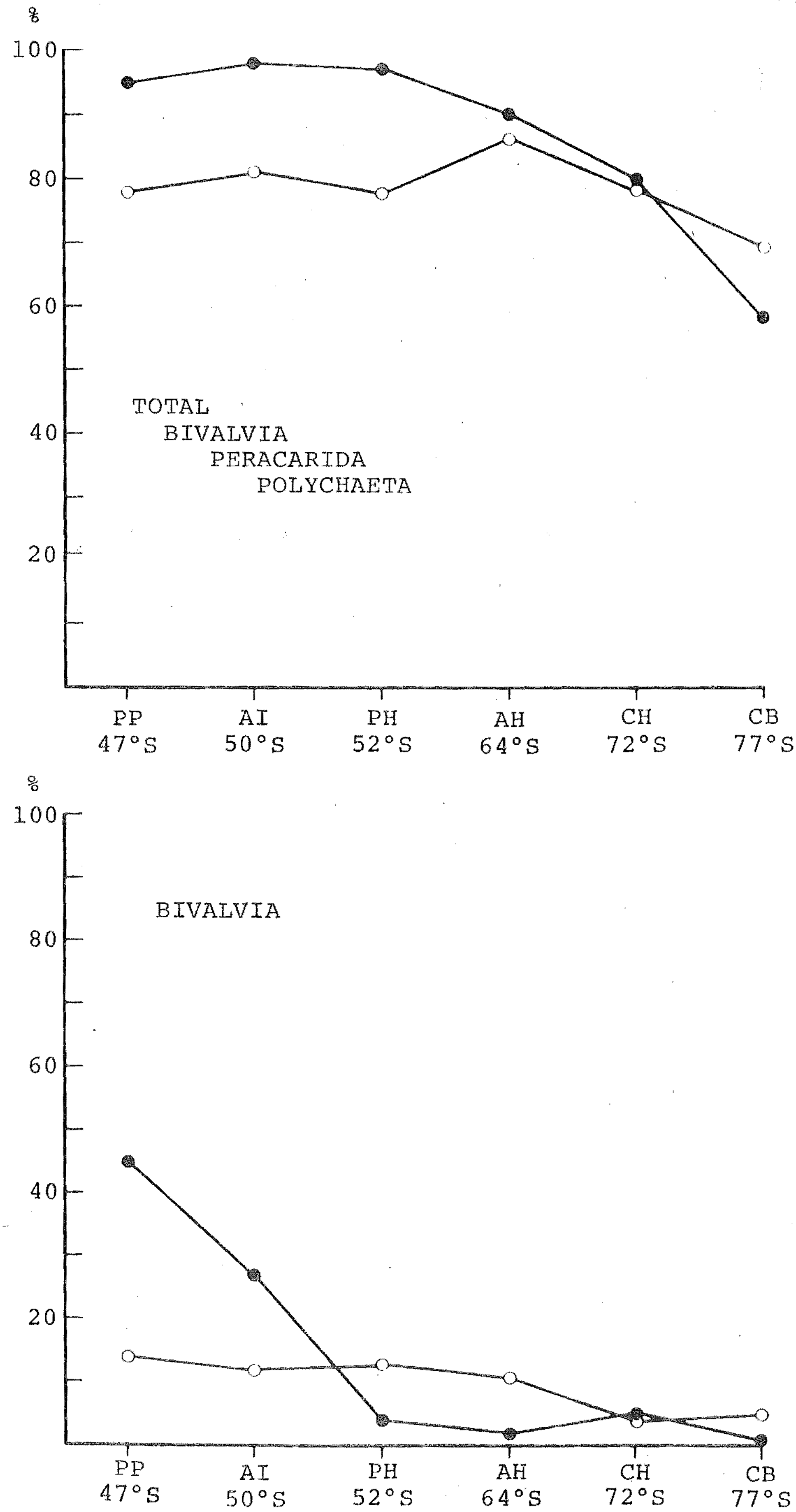
Changes in the compositional structure of the macrobenthos occur along the gradient, and in this section I intend to outline these changes for the three most important groups, Bivalvia, Peracarida, and Polychaeta. Based on the palaeoclimatology and palaeogeography of the Southern Ocean I will discuss some of the selective pressures which have affected the macrobenthos of that area. A synthesis outlining the development of the fauna, throughout the Tertiary Period, will account for the latitudinal changes in the composition of the macrobenthos.

Changes in the Composition of the Macrobenthos between 47°S and 77°S Latitude

Figure 29 indicates that in the shallow coastal waters between southern New Zealand and McMurdo Sound the major components of the infaunal macrobenthos are the Bivalvia, Peracarida, and Polychaeta. The percentage composition of bivalve molluscan species on the Campbell Plateau remains fairly constant between 11% and 14% from southern Stewart Island to Campbell Island (figure 30). South of the Antarctic Convergence the percentage composition decreases from 10% of the infaunal benthos at Anvers Island to about 5% along the Victoria Land Coast. Peracarid crustaceans form a mirror image of the bivalve distribution, and always make up a larger part of the shallow water benthos than the bivalves. The percentage composition of the peracarid species is fairly constant from 24% of the benthos at southern Stewart Island to 31% at Campbell Island

Figure 29. Percentage composition of the total bivalve, peracarid, and polychaete component for species (O—O) and individuals (●—●) in the shallow water macrobenthos along the latitudinal gradient between southern New Zealand and McMurdo Sound. PP, 47°S: Port Pegasus, Stewart Island; AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands; PH, 52°S: Perseverance Harbour, Campbell Island; AH, 64°S: Arthur Harbour, Anvers Island; CH, 72°S: Moubray Bay, Cape Hallett; CB, 77°S: Cape Bird, Ross Island.

Figure 30. Percentage composition of the bivalve component for species (O—O) and individuals (●—●) in the shallow water macrobenthos along the latitudinal transect between southern New Zealand and McMurdo Sound. PP, 47°S: Port Pegasus, Stewart Island; AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands; PH, 52°S: Perseverance Harbour; AH, 64°S: Arthur Harbour, Anvers Island; CH, 72°S: Moubray Bay, Cape Hallett; CB, 77°S: Cape Bird, Ross Island.


%
100
80
60
40
20
TOTAL
BIVALVIA
PERACARIDA
POLYCHAETA
PP 47°S
AI 50°S
PH 52°S
AH 64°S
CH 72°S
CB 77°S
%
100
80
60
40
20
BIVALVIA
PP 47°S
AI 50°S
PH 52°S
AH 64°S
CH 72°S
CB 77°S

(figure 31). There is an increase in the percentage composition of peracarids south of the Antarctic Convergence. At Anvers Island the peracarid component comprises 41% of the benthos and along the Victoria Land Coast the range is 35% to 41%. The polychaetes show a slightly decreasing percentage composition from 41% of the benthos at Port Pegasus, Stewart Island to 31% in McMurdo Sound, Ross Sea. There is no significant change across the Antarctic Convergence (figure 32).

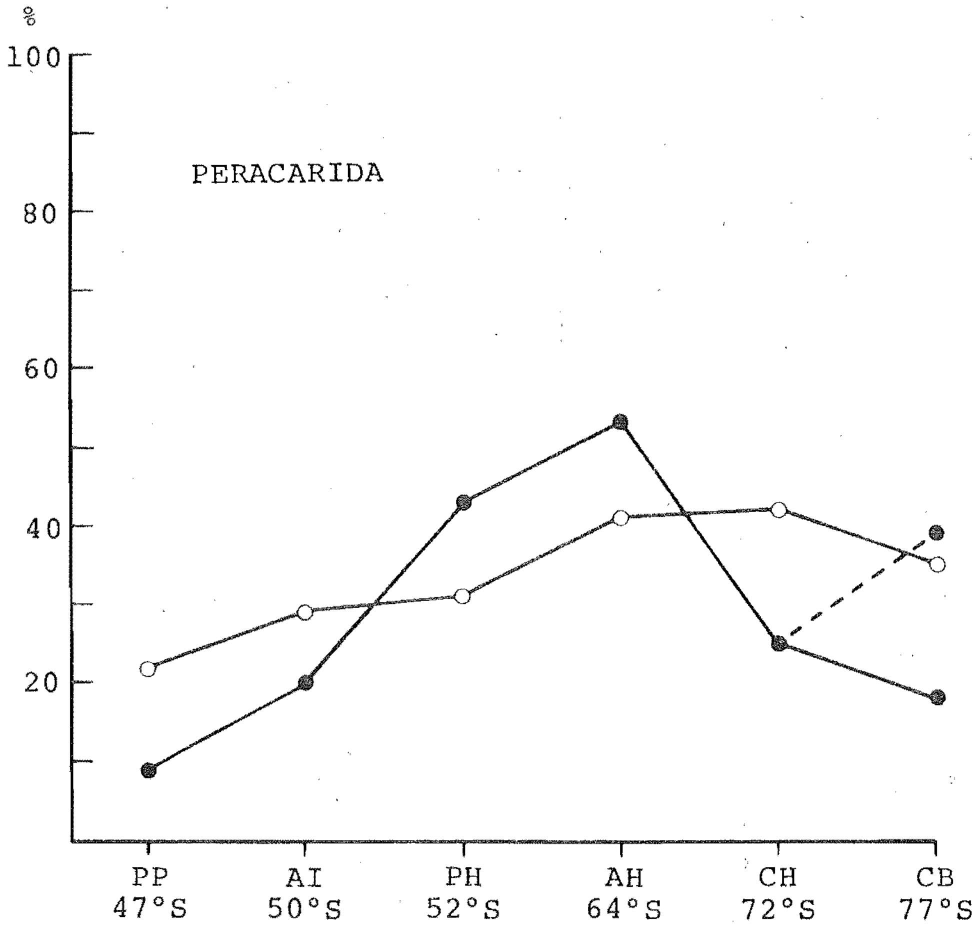
The population densities of these three groups show similar trends to the species composition, but in a more pronounced manner. Bivalves drop from the most abundant group in the benthos of southern New Zealand with 39% of the population to an insignificant group, making up only four percent of the population, at Campbell Island (figure 30). Below the Antarctic Convergence they never make up more than six percent of the benthos, and in McMurdo Sound, they contribute only one percent to the population.

Peracarid populations show the largest fluctuations among the three groups (figure 31). From only 16% in Port Pegasus they increase to make up 21% of the Auckland Islands population, and 43% of the Campbell Island population. Even though peracarids maintain the highest proportion of macrobenthic species on the Antarctic shelf their proportion of the population decreases sharply from a high of 50% in Arthur Harbour to a low of 16% at Cape Bird. At Cape Bird peracarids appear to be in direct competition with the equally successful, though less diverse, ostracods. If the situation is adjusted to include the ostracods then crustaceans and polychaetes are equally abundant, each with 40% of the macrobenthos. Polychaetes are generally the most abundant animals along the entire latitudinal range. Only in Port Pegasus, where they are slightly less abundant than the bivalves, and in Arthur Harbour where they are less abundant than the peracarids, are polychaetes not the dominant group. At Campbell Island, the Auckland Islands, and at Cape Hallett polychaetes make up 50% of the sampled population. At Cape Bird they make up 44%, and the low value of 35% in Arthur Harbour may be adjusted to 40% if the abundant oligochaete *Torodrilus lowryi* is included (figure 32).

Proceeding from the cool temperate areas of the Campbell Plateau into the polar waters of McMurdo Sound, bivalve molluscan species and numbers decrease dramatically. Peracarids increase along the same

Figure 31. Percentage composition of the peracarid component for species (O——O) and individuals (●——●) in the shallow water macrobenthos along the latitudinal transect between southern New Zealand and McMurdo Sound. Broken line represents peracarid and myodocopid ostracod components combined. PP, 47°S: Port Pegasus, Stewart Island; AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands; PH, 52°S: Perseverance Harbour, Campbell Island; AH, 64°S: Arthur Harbour, Anvers Island; CH, 72°S: Moubray Bay, Cape Hallett; CB, 77°S: Cape Bird, Ross Island.

Figure 32. Percentage composition of the polychaete component for species (O——O) and individuals (●——●) in the shallow water macrobenthos along the latitudinal transect between southern New Zealand and McMurdo Sound. Broken line represents the polychaete and oligochaete components combined. PP, 47°S: Port Pegasus, Stewart Island; AI, 50°S: Waterfall Inlet and Sandy Bay, Auckland Islands; AH, 64°S: Arthur Harbour, Anvers Island; CH, 72°S: Moubray Bay, Cape Hallett; CB, 77°S: Cape Bird, Ross Island.


%
100
80
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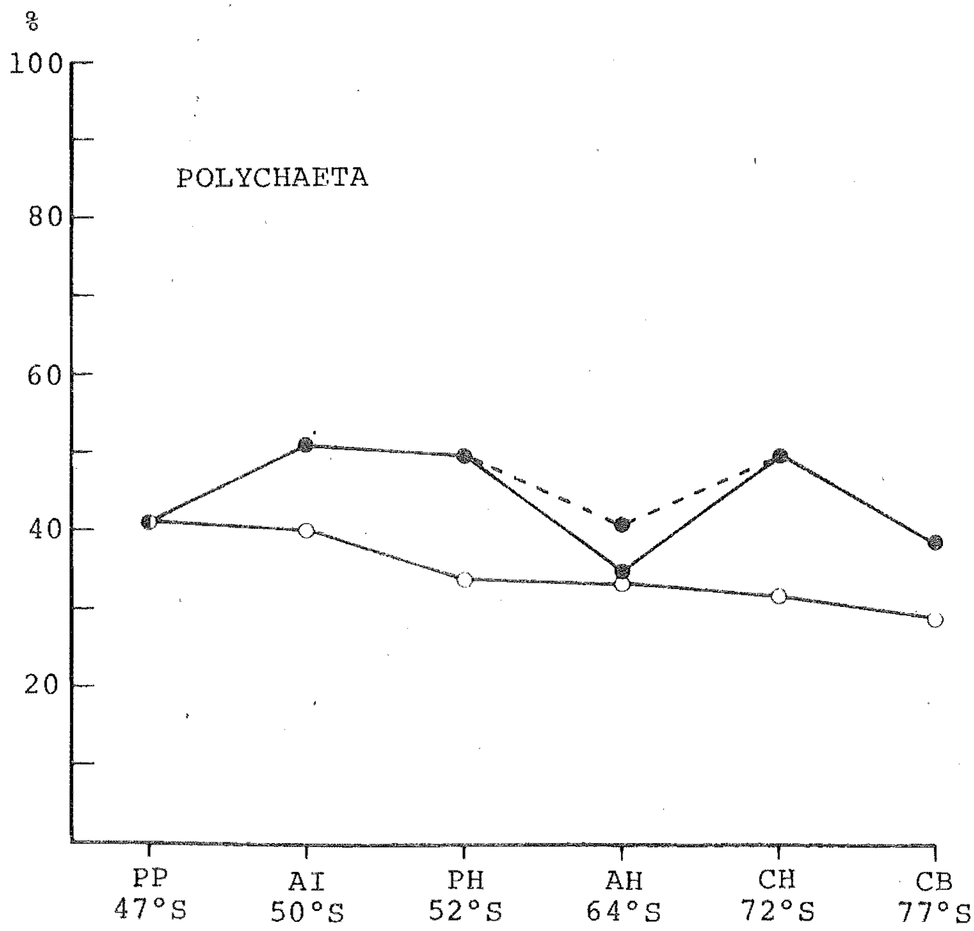
PERACARIDA
PP
47°S
AI
50°S
PH
52°S
AH
64°S
CH
72°S
CB
77°S


%
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CB
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gradient, but although their populations remain high in numbers the proportion of individuals in the macrobenthos declines in the Ross Sea. This decline results from a lack of abundant suspension-feeding peracarids and an increase in the populations of other groups, particularly at Cape Bird where sea anemones and myodocopid ostracods make up 39% of the population. Polychaetes are generally the most stable and abundant group along the gradient and are considered the most important macrobenthic group. If these three groups are taken as a whole (figure 29) they make up a dominant part of the macrobenthos on the Campbell Plateau. Further south on the Antarctic shelf the proportions of species and individuals decline. Simultaneously an increase in sea anemones and myodocopid ostracods, and to a lesser extent oligochaetes and sipunculids, occurs. To substantiate these findings I have compared the Antarctic groups under discussion with warmer northern faunas, and the results are given below.

Bivalvia

Based on the studies of Dell (1964), Nicol (1964A, B, 1966A, B, 1967, 1969, 1970), Stehli (1968) and this study, the bivalve molluscs of the Southern Ocean do not appear to be a very important or successful part of the shelf benthos. In the Antarctic fauna families, genera, and species are all depauperate (Table 32), and compare favourably only with the Arctic cold water fauna.

Table 32. Families, genera, and species of bivalves living in the Arctic, Antarctic, New Zealand, and the Panamic Province (after Nicol, 1967).

Geographic area	Families	Genera	Species
Antarctic (Nicol, 1967)	19	32	68
Arctic (Nicol, 1967)	23	37	66
New Zealand (Dell, 1964)	44	142	400
Panamic Province (Keen, 1958)	46	147	555

The most important families on the Antarctic shelf appear to be the Limopsidae and the Philobryidae, each represented by two genera and 10 species. The Nuculanidae have five genera and eight species and the Lasaeidae and Cyamiidae, each with three genera, have eight and seven species respectively. Other families which occur regularly in the benthos are the Limidae, with one genus and five species, the Thyasiridae, with two genera and three species, the Laternulidae with one species *Laternula elliptica*, and the Thraciidae represented by *Thracia meridionalis*. Widespread important families such as the Veneridae, Tellinidae, Lucinidae, Cardiidae, and Mactridae are absent, and the Arcidae, Mytilidae, and Pectinidae are represented by only one species each. Other groups excluded from the Antarctic shelf are the families adapted to shell attachment, such as the Ostreidae, rock and mud burrowers, such as the Pholadidae, and wood burrowers such as the Teredinidae (Nicol, 1967). Infaunal Nuculidae are apparently very rare and the Malletidae are represented by only one species. Overall, the most successful families appear to be the epifaunal suspension-feeders.

The temperate New Zealand bivalve fauna has over twice as many families and four times as many genera and species as the Antarctic fauna. The Veneridae, not represented in the Antarctic, contain 22 species in 12 genera, and the Cyamiidae and Lasaeidae, each with six genera, are represented by 27 and 22 species respectively. The warm water families Carditidae and Pectinidae have 21 and 19 species, and the Nuculidae which are very rare in the Antarctic are represented by 15 species in four genera. The top five families in the Antarctic are also important members of the New Zealand fauna. Consequently, just north of the Antarctic Convergence a fauna with many of the elements of the Antarctic fauna occurs, but is much more diverse and successful.

Peracarida

Whereas bivalves show a definite decrease in diversity with increasing latitude peracarid crustaceans show a definite increase. The success of this group may be judged by examining the Amphipoda. On the Antarctic continental shelf including the Scotia Arc there are 328 species distributed among 143 genera and 28 families

(Lowry, Part 5 of this thesis). The cold water families Lysianassidae, with 30 genera and 81 species, and the Eusiridae, with 24 genera and 56 species dominate the fauna. Three other cold water families, the Stenothoidae, Acanthonotozomatidae, and Paramphithoidae are also very well represented. Comparing this fauna with the temperate New Zealand amphipod fauna it becomes apparent that the gammaridean Amphipoda are a very successful cold water group. Although both faunas are represented by the same number of families the New Zealand fauna contains only 95 genera and 168 species. The important Antarctic families Lysianassidae and Eusiridae rank second and third in the New Zealand fauna but they are represented by comparatively reduced numbers of genera and species. Two other important families in the New Zealand fauna are the widely distributed Corophiidae and Gammaridae, but neither is particularly diverse in this area. Barnard (1969) recognized the definite cold water character of the gammaridean Amphipoda. He showed that, of the amphipod families confined to specific regions, 80% were restricted to the cold high latitudes. Menzies, George, and Rowe (1973) came to a similar conclusion for the Isopoda. They found that more than twice as many isopod genera live on the Antarctic shelf than on other shelf regions in the world.

Polychaeta

The diversity of polychaete worms is not greatly affected by changes in latitude. Polychaetes usually make up about 50% of the benthic infauna and appear little affected by the high latitude environment. On the Antarctic continental shelf there are presently 324 described species in 177 genera and 36 families (Knox and Lowry, in press). The four main families, Syllidae, Polynoidae, Terebellidae, and Phyllodocidae are cosmopolitan as are most of the remaining families. In the well known fauna of California (Hartman, 1961) the Spionidae are the most diverse family, but the Polynoidae, Syllidae, Terebellidae, and Phyllodocidae rank next in order. Comparing the Antarctic polychaete fauna with New Zealand as was done for the bivalves and amphipods is not as rewarding because the polychaetes are not as well known. The four main families in the Antarctic fauna are also well represented in New Zealand, however the Eunicidae, Nereidae, and Serpulidae are also well represented. When the spionid fauna becomes better described it will probably rank much higher. Presently there are about 280 species described from New Zealand in about 150 genera and 39 families.

Two of the three major groups along the transect from Port Pegasus to McMurdo Sound show changes in their composition with latitude. The bivalves show diminishing numbers of species and diminishing population densities with increasing latitude. The peracarid crustaceans increase in numbers of species and have higher population densities with increasing latitude. Polychaetes remain basically unchanged with regard to numbers of species and population densities along the transect. Comparing the total fauna for each group between New Zealand and the Antarctic substantiates these findings.

The obvious differences in the composition of these groups along the latitudinal gradient are due to the different responses to selective pressures working in the temperate and cold water environments along the gradient. In the following section I will outline the requirements for life in the cold water benthos as it applies to the groups discussed above, and then trace the development of this fauna based on the palaeoclimatology and palaeogeography of the Southern Ocean.

Requirements for Life on the Cold Antarctic Shelf

The cold water Antarctic environment selects for slow growing, long-lived animals which brood their young. They may have one set of young per year timed to enter the population during the summer maximum food supply, or they may have continuous reproduction. They may be large or small, but if they use large amounts of calcium they are usually small.

The depauperate nature of the Antarctic bivalve molluscan fauna appears to be due to an inability to adapt to these requirements. Most bivalves today are found in the tropics (Stehli *et al.*, 1967), and the majority have pelagic larvae (Mileikovsky, 1971). Thorson (1950) found that the average time for larval development in a tropical or temperate climate was three weeks. However, in a temperature range of 2.5°C to 4.5°C development time increased to between four and six weeks. In waters below 0°C the development time would be expected to be considerably longer. Pearse (1969) found in McMurdo Sound that the asteroid *Odontaster validus* took between 40 and 55 days to reach an early bipinnaria stage of its indirect demersal development. He believed that it might take six months for metamorphosis to occur, during which time the larva is a demersal deposit-feeder. According to Pearse (1969) the response to selective pressures has not been so much towards direct development through brooding as Thorson (1950) suggested, but more towards the continuation of indirect development through demersal feeding larvae. If indirect development takes six months, during which time the larva must feed itself, then demersal development appears more advantageous than planktonic development for two reasons. The larva would have a continuous food supply, and predation would not be as intense. Nonetheless, the third choice, brooding, appears to be most common among Antarctic bivalves. Nicol (1967) stated that the Phylobryidae and the Cyamiidae, families which have probably evolved in response to the cold water climate, brood their young. Arnaud (1974) listed 32 species of bivalves from the Southern Ocean which have been recorded as brooders, however the record is far from complete.

Kennett (1968) discussed the calcium carbonate compensation depth (CCD) in the Ross Sea. Using the depth distribution of calcareous and arenaceous benthic foraminifera he determined the CCD to be at 550 m which is very shallow compared with other areas. He attributed this shallow solution boundary to the very low temperatures and the high salinities of the Ross Sea. The under-saturated nature of the water means that extracting calcium carbonate for shell building and maintenance requires relatively more energy than in warmer water. Nicol (1967) and Kennett (1968) have remarked on the thin and chalky appearance of Antarctic bivalve shells, and Kennett discussed the deleterious erosional effects caused by this phenomenon on dead foraminifera tests. Nicol (1967) also commented on the lack of shell ornamentation in cold water bivalves. Arnaud (in press) mentioned the exceedingly fragile nature of the Mollusca, Echinodermata, and Bryozoa living on the Antarctic shelf.

Nicol (1964B, 1966B) has shown conclusively that the Antarctic Bivalvia is the smallest fauna known. Sixty-one percent of the species are less than 10 mm in length or height, and the Phylobryidae and Cyamiidae are the most important families contributing to the small-sized fauna. The next smallest bivalve fauna is found in south Australia where 38% of the species are less than 10 mm (Nicol, 1966B).

Bivalves are considered to be an unsuccessful group in the Antarctic macrobenthos. Their inability to diversify on the Antarctic shelf is attributed to the strong selective pressure for brooding in cold water environments and the undersaturated nature of the Antarctic shelf waters in regard to calcium carbonate. In fact bivalve molluscs appear to be at the southern limit of their diverse and effective role as suspension and deposit-feeders in the macrobenthos at Port Pegasus. Below this point they may develop large monotypic populations of suspension-feeders such as *Perrierina aucklandica* at the Auckland Islands and *Mysella charcoti* and *M. miniascula* at the South Orkney Islands (Robins, 1972). However they are increasingly replaced as deposit-feeders by peracarids and as suspension-feeders by polychaetes with increasing latitude in the Southern Ocean.

In contrast the Peracarida are a very successful group in the Antarctic macrobenthos. Peracarids are brooders, a strong requirement for success in cold water climates. They are mainly generalized deposit-feeders which means that they have a continuous food supply and do not have to adapt their reproductive behaviour to a short summer plankton cycle. In addition peracarids are not reliant on large amounts of calcium carbonate for exoskeleton production. It is interesting to note that large reptant decapod crustaceans with heavily calcified shells and pelagic larvae are absent from the Antarctic shelf fauna.

Because of their cosmopolitan nature and the similarities at the family level between faunas living today it is probable that the same polychaete families represented on the Antarctic shelves during the warm Eocene period are represented there today. In adjusting to a cold water environment polychaetes were at an advantage because of their generalized feeding habits. Their major change has been the successful suppression of the pelagic trochophore larva into a form which develops demersally either in the tube of sedentary tube builders or on the body in errantiate forms. Hartman (1967A) and Arnaud (1974) reviewed the types of brooding developed by polychaetes in response to these changes. Arnaud listed four types of brooding which have evolved in Antarctic polychaetes: 1. Incubation on the body either under the elytra as in the polynoid *Polynoe antarctica* or in the tentacular crown as in the sabellid *Potamilla antarctica*, in a special cephalic cage as in *Flabelligera mundata* or attached to the body as in the syllid *Pionosyllis nutrix*. 2. Incubation in the adult tube either in lateral capsules as reported for *Nothria notialis* by Hartman (1967A, B) or in the tube itself which is the case for many of the Antarctic serpulids in the genus *Spirorbis*, for the onuphid *Paronuphis antarctica* reported by Hartman (1967A), and for the maldanid *Rhodine loveni* reported by Lowry (1975). 3. In the operculum of *Spirorbis* (*Pileolaria*) *moerchi* as reported by Harris (1969). 4. In pouches formed in the female as in the syllid *Parautolytus fasciatus* and the phyllodocid *Eteone gaini*. Furthermore polychaetes are not affected by the calcium problem. Only one family, the Serpulidae, uses calcium in tube building. Although the tubes are fragile the animals are not stunted, and the family is represented by 22 species in the Antarctic. The ease with which polychaetes have adjusted to the Antarctic shelf cold water environment is evident from the low percentage of endemic Antarctic genera (7%) and species (38%) (Knox and Lowry, in press).

To understand how this situation came to be it is necessary to look at the palaeohistory of the Southern Ocean. The break-up of Gondwanaland and its attendant palaeoclimatic and palaeogeographic events set the stage for the evolution of the peculiar fauna living on the Antarctic shelf today.

Palaeoclimatology and Palaeogeography of the Southern Ocean from the Eocene to the Recent

During the Cretaceous Period equatorial seas extended around the earth almost uninterrupted (Frakes and Kemp, 1972). In the Southern Hemisphere, Antarctica, then part of Gondwanaland, was very close to its present position near the rotational pole, but with South America, South Africa, New Zealand, and Australia attached. New Zealand separated from Australia and Antarctica in the Cretaceous, 60 to 80 million years before present (M.Y.B.P.). By the late Paleocene (55 M.Y.B.P.) the Tasman Sea had formed and Australia began to separate from Antarctica. However, the South Tasman Rise, which is of continental origin, was still part of Victoria Land and because of this no major current system could develop between Australia and Antarctica. Fossilized foraminifera from south of the Tasman Rise indicate that there was a shallow sea (200 m - 300 m) between the two continents with a fairly diverse fauna and a sluggish current system (Kennett *et al.*, 1975). The whole of the Eocene was probably the warmest period in the Tertiary. Frakes and Kemp (1972) postulated large oceanic gyres during this period which extended from the equator to the high latitudes and brought warm water to the Antarctic coastline. Their reconstructed palaeotemperatures at 60°S latitude are 24°C for the Queen Maud Coast, 17°C for the shallow sea between Australia and the Antarctic, and 7°C for the attached southern South America - Antarctic Peninsula coastline.

In the late Eocene - early Oligocene (38 M.Y.B.P.) major changes began to occur which transformed the global warm climate into the modern climatic regime of today. At that time there was a dramatic lowering of austral temperatures. This resulted in near freezing surface coastal waters of the Antarctic coastline, which probably caused sea level glaciation around the continent. It caused the formation of cold Antarctic bottom water which sank and began to move into the ocean abyss. This invasion of the "warm" water abyss profoundly affected the deep sea fauna (Menzies *et al.*, 1973). Associated with this thermoclinal circulation system was an increase in the calcium carbonate compensation depth (CCD) (Heath, 1969; Van Andel and Moore, 1974). Jenkins (1974) recorded a decrease in planktonic foraminiferal diversity at this time. Succeeding Antarctic foraminiferal faunas throughout the Oligocene had low diversities (Margolis and Kennett, 1970, 1971). However, in the late Eocene, siliceous micro-fossils such as diatoms and radiolarians became increasingly diverse and abundant, and remained unchanged throughout the Oligocene. This indicates a change to a cold water biota.

In the late Oligocene (25-28 M.Y.B.P.) the South Tasman Rise finally separated from Victoria Land sufficiently to allow the formation of the Circumantarctic Current. It is thought that the Drake Passage formed sometime between the initial separation of Australia from Antarctica and the final separation of the Tasman Rise (Kennett *et al.*, 1975). The resultant current prevented sedimentation in this area during the later Oligocene, and sediment deposition did not occur again until the Tasman Rise moved farther north and the current slowed.

In the early Miocene (22 M.Y.B.P.) the Antarctic Convergence formed, producing a major biological barrier which is still operating today. Large ice sheets developed rapidly in the East Antarctic by the middle Miocene. Dell and Fleming (1975), using fossil molluscan evidence, suggested that sheltered rocky coastlines of the Ross Sea were, at that time, probably ice-free and kelp-fringed, not unlike Tierra del Fuego today. By the late Miocene - early Pliocene (4.2 - 5 M.Y.B.P.) the West Antarctic ice sheet had formed and was much thicker than today (Shackleton and Kennett, 1975). During this time siliceous plankton productivity steadily increased. Hays (1969) observed two intervals of distinct cooling at 2.5 and 0.7 M.Y.B.P. and climatic oscillations during the last 3.5 million years, with a steadily increasing coolness up to the present time.

Evolutionary Synthesis: The Development of the Fauna

From the late Cretaceous to the end of the Eocene the Antarctic shelf probably supported a relatively warm water fauna. The fossil record indicates that the then widespread bivalve family Inoceramidae was common in the area of the Antarctic Peninsula (Thomson, 1967, 1972; Thomson and Willey, 1972). Warm water Crustacea were also present. Ball (1960) reported decapods of the lobster family Homaridae, along with glypheid and callianassid anomurans. The general structure of the macrobenthos probably resembled the warm water communities studied by Sanders (1968) or the Port Pegasus community described earlier. It was generally a macrobenthos mainly composed of bivalves and polychaetes with peracarids playing a lesser role. This type of fauna probably persisted into the early Tertiary.

Decreasing sea water temperatures of the late Eocene - early Oligocene began to change the structure of the Antarctic shelf fauna. The formation of the Antarctic convergence in the Oligocene and the prolonged Antarctic glaciation brought sea water temperatures near 0°C on the Antarctic shelf (Shackleton and Kennett, 1975). Antarctic bottom water began to form. These changes virtually trapped the warm water shelf fauna. Unlike the North Atlantic warm water fauna which was able to retreat south during the Pleistocene cooling (Mills, 1965; Berggren and Hollister, 1974), the shelf fauna of the Antarctic was blocked to the south by the continent and blocked to the north by the cooling abyss. The shelf species either became extinct or adapted to the new environment. But they were not replaced by cold water species because none were available. Consequently the Antarctic shelf became a centre of extinction, evolution, and to a lesser extent, radiation.

The pre-Oligocene fauna was probably adapted to a fairly stable environment. But as temperatures decreased new selective pressures came into play. The adult populations were probably able to cope with lowered temperatures. However, as temperatures decreased pelagic larval life lengthened. Larvae would thus become more susceptible to predation. In addition lecithotrophic larvae would need much larger yolk reserves, and planktotrophic larvae would have to feed themselves through a much longer period. There would be a strong selective pressure for brooding. Peracarid crustaceans were probably not affected by changing water temperatures because of their prepossession of brooding. Polychaetes are noted for their reproductive flexibility (Gravier, 1923; Mileikovsky, 1971; Arnaud, 1974) and probably adapted smoothly to the changing environment. Bivalve molluscs would have been most seriously affected by decreasing sea water temperatures. This Palaeozoic group is mainly dependent on pelagic larvae for reproduction and has apparently not been able to adopt alternative forms in quantity.

A more devastating effect of decreasing sea water temperatures was the raising calcium carbonate compensation depth (CCD). The phenomenon would have directly affected adult macrobenthic molluscs just as it affected foraminiferans in the plankton (Kennett, 1968) by making shell construction and maintenance an energy debit. In response Antarctic bivalves evolved the smallest sized fauna presently known (Nicol, 1964B, 1966B). The Arctic bivalve fauna is just as depauperate as the Antarctic fauna but larger (Nicol, 1966B). This is thought to be due to a deeper CCD in the North Polar Ocean (Arnaud, in press). Polychaetes and peracarid crustaceans would not be affected by the shallow CCD in the Antarctic because of their low requirement for calcium.

Consequently adults and larvae of the Bivalvia were detrimentally affected by decreasing sea water temperatures on the Antarctic shelf which began in the Oligocene. Although polychaete larvae were affected, their genetic flexibility enabled them to adapt to the changing environment. No life history stage of the peracarid crustaceans was apparently affected. The large scale reduction of bivalve molluscs on the Antarctic shelf opened a number of ecological niches. The vacant deposit-feeding niches have been exuberantly filled by peracarid crustaceans while the suspension-feeding niches have been filled to some extent by sabellid and spionid polychaetes and edwardsiid anemones.

By the mid-Miocene the Antarctic convergence was operating, the continental ice sheets were growing rapidly and the terrigenous calcium supply was probably no longer contributing significantly to the Southern Ocean. The old Antarctic warm water fauna was probably only represented by remnants. The Southern Ocean was effectively isolated and becoming similar geographically and climatically to what it is today. So for about the last 20 million years the situation has been relatively stable except for advancing and retreating ice shelves.

Dell and Fleming (1975) found 17 molluscan taxa present in Miocene sediments from the Ross Sea. Seven taxa were recognized as characteristic of the modern Antarctic fauna including *Yoldia eightsi, Nuculana* cf. *inaequisculpta*, and *Limopsis* aff. *marionensis*. Five additional taxa were considered predecessors of taxa now living in southern South America and the Scotia Arc, and four taxa were considered to be widespread temperate forms no longer found in southern South America or the Antarctic. This very interesting molluscan assemblage indicates that remnants of a pre-Oligocene widespread temperate fauna were still part of the Miocene Antarctic shelf benthos. However precursors of the present day Subantarctic and Antarctic faunas already constituted a large proportion of the benthic Mollusca.

During the late Pliocene and the Pleistocene as bivalves struggled with the environment an evolutionary explosion occurred among peracarids. For instance, in the Amphipoda, the Lysianassidae, Acanthonotozomatidae, Eusiridae, and Paramphithoidae became extremely diverse Antarctic families. In the Acanthonotozomatidae nearly 80% of the world species occur in the Southern Ocean, and in the Lysianassidae nearly one half of the world species of *Orchomene* occur in the Southern Ocean. Among the Amphipoda 90%

of the Southern Ocean species are endemic (Knox and Lowry, in press). In such a stable environment it is difficult to understand how speciation of such magnitude could occur. Wilson (1969) proposed that during extreme periods of glaciation in the Tertiary and in the Pleistocene ice shelves would advance over the Antarctic continental shelf. In interglacial periods such as the present time they would largely recede. An interglacial remnant of these large seas is the present Davis Sea formed by the Shackleton Ice Shelf and the West Ice Shelf.

As the ice shelves advanced large isolated seas would be formed around the continental shelf. Species would find refuge in these seas. In this way populations would become genetically isolated from each other. As the ice shelves retreated during interglacial periods populations would again mix, but reproduction would no longer be possible. Preliminary examination of present distributions tends to substantiate this theory. For instance, in the Acanthonotozomatidae there are presently at least six monotypic genera known with extremely restricted ranges around the continent. Two of these genera are known from the Davis Sea.

Of course, bivalves and polychaetes would also occur in these isolated seas, but neither speciated to the extent of the peracarids. As was mentioned earlier, polychaetes have only 7% endemic genera and 3% endemic species on the Antarctic shelf (Knox and Lowry, in press), and although many of the Antarctic bivalves are endemic there are not more than 72 species in the total fauna (Nicol, 1966A).

The above is a possible pathway by which the Antarctic fauna came to possess its peculiar peracarid-polychaete macrobenthos. But this does not account for the major changes in compositional structure of the macrobenthos between 47°S and 52°S on the Campbell Plateau. In this area the macrobenthos changes from a temperate bivalve-polychaete form to a cold water peracarid-polychaete form.

When the New Zealand region separated from Australia and Antarctica during the Cretaceous Period all of these areas shared a similar relatively warm water fauna. The warm climate continued to the end of the Eocene (Hornibrook, 1953) as the New Zealand region moved northward. By the time of the Oligocene cooling it was well separated from Antarctica. Consequently, while temperatures near the Antarctic coast decreased to near 0°C the temperatures on the

Campbell Plateau did not go below 7°C (Shackleton and Kennett, 1975). According to Fleming (1975) temperatures rose again in the New Zealand region and were above present day temperatures until the Pliocene. But by the end of the Pliocene temperatures for middle New Zealand had decreased to 10°C. This corresponds to the present temperature at Campbell Island. During the Pleistocene there were alternating warm and cool periods, and during the cool periods glaciation was extensive in southern New Zealand.

As the New Zealand region moved north it remained ahead of the progressively cooling situation to the south. Because of this it was able to retain a warm water fauna, and replenish it with introductions from the Indo-West Pacific, and later from Australia which was also moving north (Fleming, 1975). Thus at the Eocene-Oligocene boundary the Campbell Plateau was not as severely affected as the Antarctic shelf. Although the lower Miocene is considered warmer than the Eocene in New Zealand some molluscs now confined to the New Zealand Subantarctic (*Hochstetteria, Kidderia*) were already present in the fauna (Fleming, 1975). There is also evidence that the Antarctic fish genus *Notothenia* lived in New Zealand during the mid Miocene (Stinton, 1957). By the late Miocene - early Pliocene with Subantarctic waters covering the east coast of New Zealand, the macrobenthos of the Campbell Plateau would certainly have taken on a cold water character. This situation became extreme during the Pleistocene glaciations when normally Subantarctic marine species were found as far north as the North Island (Fleming, 1975). Maxwell, in Beu and Maxwell (1968), mentioned Antarctic forms in the New Zealand fauna during this time. In the post-Pleistocene the New Zealand fauna migrated south again and communities with temperate compositional structure are presently found at the southern end of Stewart Island. However, south of this point the macrobenthos takes on the compositional structure of the cold water peracarid-polychaete form. Thus Pliocene - Pleistocene climatic changes on the Campbell Plateau induced changes in the macrobenthos causing a post-Pleistocene fauna with a cold water structure. This structure is more similar to the macrobenthos on the Antarctic shelf than to the much closer temperate macrobenthos of New Zealand.

The low temperatures of the Pleistocene almost certainly depleted the bivalves of the Campbell Plateau, and caused a northward migration. Fleming (1975) noted the cold water scallop *Chlamys delicatula* from the North Island during this period. However, when post-Pleistocene waters began to warm up again to around the 10°C level one would expect a reinvasion of the area. Peracarids and polychaetes in particular give every indication of being a relatively rich fauna on the shallow parts of the plateau, but bivalves are depauperate (Knox, 1960) not only in the soft bottom benthos but also in intertidal areas. The problems of low temperatures and lack of calcium which devastated the Antarctic shelf bivalve fauna do not presently apply here.

Judging from the current patterns south of New Zealand it appears easier to emigrate than to immigrate. Current systems immediately south of New Zealand (Knox, 1975) are mainly moving in a northerly direction via the Southland Current or the West Wind Drift. Consequently species moving south with warming post-Pleistocene temperatures would be moving against a northerly flowing current system, and species with pelagic larvae would be at a particular disadvantage. They have been able to move south probably by hugging the coastline as far as southern Stewart Island, but they have not been very successful at crossing the Campbell Plateau to reinvade the shallow waters around the Subantarctic Islands. Other areas of recruitment such as Australia via the Tasman Current or the Subantarctic via the West Wind Drift have not been particularly successful. The Tasman Current turns north along New Zealand and does not penetrate the Campbell Plateau and the nearest major source of species via the West Wind Drift is South America which is half way around the world. Both systems carry species by epipelagic drift which caters to specialized forms usually associated with algal rafting. In addition this area has not been a very active source of speciation since the Pleistocene. Among the Amphipoda only 30% of the known species from the Auckland and Campbell Islands are endemic while 77% of the non-endemic species are found in New Zealand (Knox and Lowry, in press). Thus the main source of species has been the temperate New Zealand mainland, but contrary current systems and low water temperatures appear to have made invasion from New Zealand difficult.

Consequently, as was stated earlier, Port Pegasus is the southern limit of the temperate macrobenthos dominated by bivalves and polychaetes. Further to the south, for reasons discussed above, the macrobenthos takes on a cold water structure dominated by peracarids and polychaetes. This results in compositional changes in the structure of the macrobenthos along the latitudinal gradient between southern New Zealand and McMurdo Sound. Bivalves become a decreasingly important part of the macrobenthos with increasing latitude and peracarids become an increasingly important component. Polychaetes remain a constant and stable part of the macrobenthos along the entire gradient.

LATITUDINAL BENTHIC DIVERSITY: A NEW LOOK AT AN OLD PROBLEM

In this section I review eight papers which deal with the macrobenthos from a variety of habitats. These include the tropical inner continental shelves of the Indian Ocean (Sanders, 1968) and the Atlantic Ocean (Wade, 1972), the boreal inner continental shelves of the North Atlantic (McIntyre, 1958; Sanders, 1960; Young and Rhoads, 1971; Boesch, 1972), and the eastern North Pacific (Lie, 1968), plus the deep sea in the North Atlantic (Sanders, 1968) and the Arctic (Paul and Menzies, 1974). Heterogeneity is plotted for these areas in a manner similar to that which I used for the Southern Ocean areas. The work of Ellis (1960) on the shallow shelves of the Canadian Arctic and western Greenland is examined, but because some of the species groups in this work were lumped together, accurate heterogeneity could not be calculated. A comparison of heterogeneity between the above mentioned areas and the areas studied on the Campbell Plateau and the Antarctic shelf is made and a mechanism is proposed to account for changes in the heterogeneity of the macrobenthos based on the *stability-time* hypothesis of Sanders (1968).

Previous Studies

McIntyre (1958) studied the bottom fauna of the Scottish inshore fishing grounds. He used a 0.2 m^2 van Veen grab to collect 20 samples at St Andrews (56°25'N 2°30'W) in depths of 11 m to 35 m. Off the Aberdeen coast (57°15'N 2°00'W) he collected 20 samples in 13 m to 46 m depth, and 12 samples on the Smith Bank (58°15'N 3°00'W) in 36 m to 70 m depth. All samples were washed through a 1.3 mm sieve. Mean annual sea water temperatures from the three areas ranged from 4.7°C to 12.4°C and mean annual salinity ranged from 34.19‰ to 34.99‰. The macrobenthos was dominated by bivalve molluscs and polychaetes which made up 65% and 27% of the population respectively, and formed a mixed suspension, deposit-feeding community. McIntyre found a total of 202 invertebrate species on the fishing grounds with a population of $1142/m^2$.

Sanders (1960) used a Forster anchor dredge to sample the soft mud bottom of Buzzards Bay, Massachusetts (41°30'N 70°31'W). He collected 25 samples from 19 m of water over a two year period, and all were washed through a 0.2 mm sieve. According to Sanders (1958) Buzzards Bay has a mean annual temperature range from 2°C to 22°C and an annual salinity range from 29.5‰ to 32.5‰. Bivalves (65%) and polychaetes (27%) made up the majority of the population, which is similar to the Scottish inshore fishing grounds studied by McIntyre (1958). However, the community in Buzzards Bay is mainly deposit-feeding. There were 79 species in the samples with a population of $8985/m^2$.

Sanders (1968) wrote an extensive paper on latitudinal changes in the soft bottom benthos. His samples included a wide range of localities from cold temperate stations off New England in the North Atlantic Ocean to tropical stations off northeastern South America and in the Indian Ocean. All samples were taken with an anchor dredge or a Higgins meiobenthic sledge on soft mud bottoms in depths from 2 m to 2500 m, and all were washed through a 0.4 mm sieve. Habitats varied from environmentally cold temperate and tropical estuaries and embayments to increasingly stable outer continental shelves and slopes, and abyssal plains. Because the polychaete-bivalve fraction usually made up at least 80% of his sampled populations, Sanders only analyzed this portion of the benthos. He did not have species lists in his paper, but I have extracted heterogeneity values from his graphs. He indicated that if the total macrobenthos had been analyzed these values would have been higher. Community feeding structure for the various habitats in Sanders' (1968) study was indeterminable, but Sanders and Hessler (1969) indicated that, in the deep sea, deposit-feeders dominate. Hessler and Jumars (1974) further emphasized the dominance of deposit-feeders in their work on deep sea benthos of the North Pacific. Sanders and Hessler (1969) also gave some information on temperature ranges in the North Atlantic deep sea. For example, they said that on the outer continental shelf of New England in 98 m the annual temperature range is 10.5°C, but down the slope at 300 m the range is 5.1°C, while at 487 m it is only 1.4°C. They described the deep sea as "remarkably stable and homogeneous" with constant darkness, salinity, oxygen, temperatures, and homogeneous sediments over large areas.

Lie (1968) sampled eight areas in Puget Sound, Washington (47°30'N 122°30'W) using a 0.1 m^2 van Veen grab in 10 m to 210 m depth. Over an 18 month period he took 405 samples, and these were washed through a 1 mm sieve. He calculated heterogeneity using Shannon's (1948) information theory and I have extracted his values from this study. According to Lie the annual temperature range in Puget Sound is 8°C to 13.5°C and salinity varies from 29.44‰ to 30.82‰. The structure of the macrobenthos in Puget Sound is complicated. At several stations ostracods dominated the fauna while at other stations bivalves or polychaetes were more important and in at least one station peracarids dominated. Lie found 367 invertebrate species in his samples. Populations at Stations 1-3 were 3150/m^2, 1232/m^2, and 2201/m^2. Communities were mixed suspension, deposit-feeding or deposit-feeding.

Young and Rhoads (1971) studied the sand and mud bottom of Cape Cod Bay, Massachusetts (42°00'N 70°15'W). They sampled seven stations in June, 1969 using a 0.1 m^2 Smith-McIntyre grab in 12 m to 42 m depth. All samples were washed through a 1 mm sieve. Annual bottom water temperature range was -1.5°C to 10°C and salinity ranged from 31.377‰ to 31.429‰. The macrobenthos was dominated by polychaetes, bivalves, and amphipods which formed deposit-feeding or mixed suspension, deposit-feeding communities. Young and Rhoads found 113 species with a mean population of 15 410/m^2.

Boesch (1972) sampled the outer continental shelf (100 m to 200 m) off southern Virginia and northern North Carolina, and the inner continental shelf (4 m to 30 m) off Eastern Shore, Virginia using a 0.2 m^2 van Veen grab. All samples were washed through a 1 mm sieve. Boesch did not give lists of species and individuals, but he did calculate heterogeneity for each of his samples and that information is used herein. According to Boesch the extreme annual temperature range for his inshore samples is 0°C to 30°C and this range decreases with distance off shore and with depth.

Wade (1972) took 64 samples of the soft bottom benthos (6.1 m to 16.5 m depth) in Kingston Harbour, Jamaica (17°58'N 76°48'W) using a 0.1 m^2 van Veen grab. He washed the samples through a 0.5 mm sieve. Annual seawater temperature ranged from 27°C to 31°C and salinity ranged from 34‰ to 36‰. Polychaetes made up 51% of the population by number, bivalves made up 14% and peracarids contributed 5%. The remainder of the macrobenthos was composed mainly of crustaceans other than peracarids. Wade found 153 species, which had a population of 240/m^2. The majority of these were deposit-feeders.

The final study reviewed here is the work of Paul and Menzies (1974) from the high Arctic deep sea. They studied 75 quantitative samples taken from Fletcher's Ice Island T-3 between October 1969 and March 1972. The areas sampled were between the Canadian Archipelago and the North Pole (84°-86°N and 122°-86°W) in 1000 m to 2500 m depth. The samples considered here were taken with a sphincter-type corer, and were washed through a 0.149 mm sieve. The marine environment, below 900 m, was very stable. Salinity (34.93‰ to 34.99‰) and temperature (-0.3°C to -0.4°C) were nearly constant, and dissolved oxygen (6.0 to 6.5 ml/l) was not limiting. Sediments consisted of coarse to fine silt and were reddish-brown. The benthos was dominated by polychaetes (45% of the individuals) and to a lesser degree by nematodes (16%) and sponges (11%). Peracarid crustaceans (8%) and bivalves (8%) were not well represented. The dominant species in the benthos were suspension-feeders, but species numbers (53 species) and population density (4/m^2) was extraordinarily low.

The six studies outlined above show a number of dissimilarities. For example, the sampling devices used in making the collections, the sieve sizes used for washing, the varying sizes of the collections used for study, and the temporal duration of the sampling. In their favour they are all quantitative studies of soft bottom benthos, in which the analytical unit is the species. Only the heterogeneity of the various communities is being compared. This is a measurement which integrates species richness and species equitability, and which has been shown to be independent of sample size (Sanders, 1968). A summary of the main points from these studies is presented in Table 33.

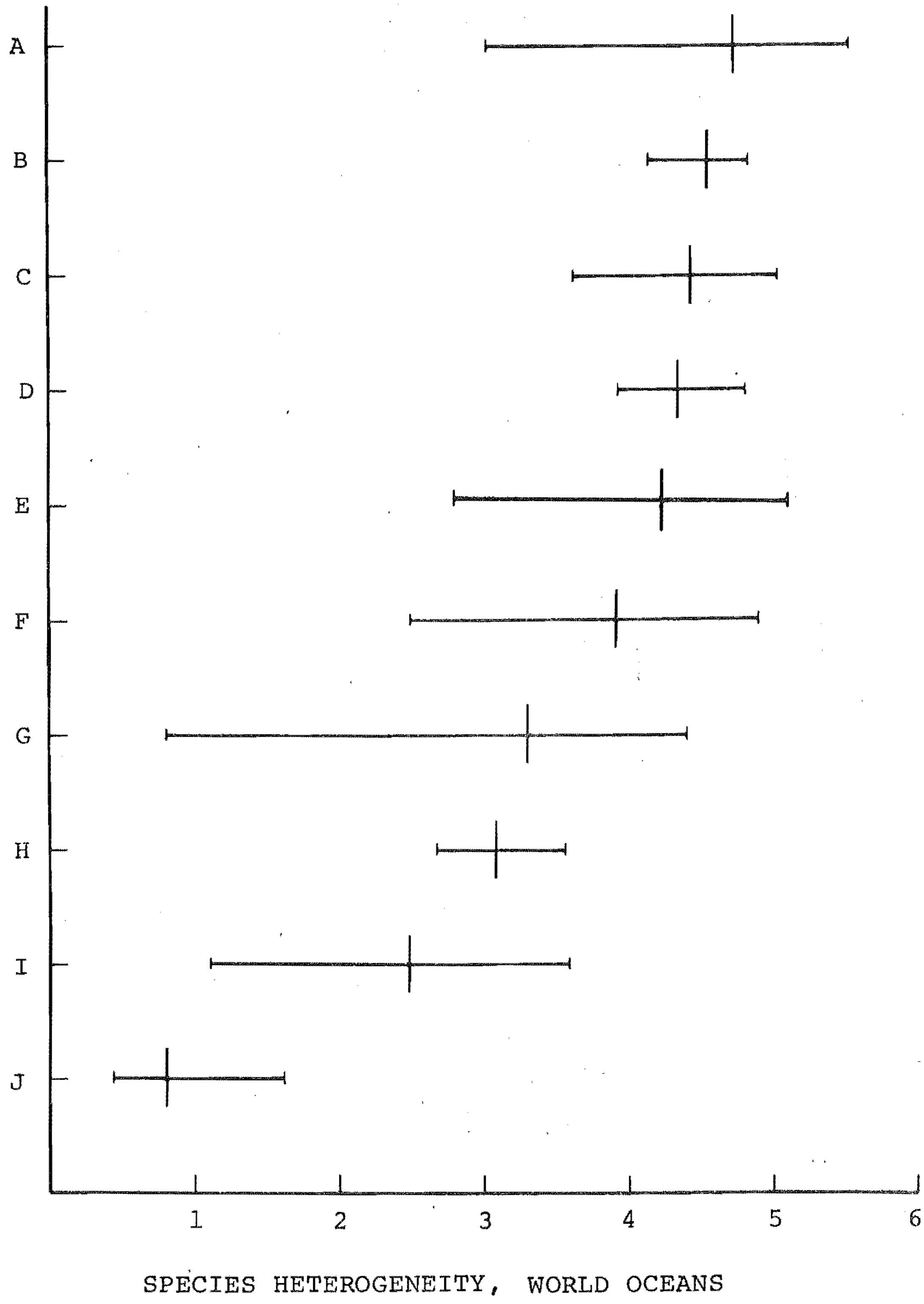
Table 33. Background data on selected benthic studies from different parts of the world oceans.

Author	Area	Depth	Annual temperature range	Salinity	Dominant groups	Trophic structure	Population density	Mean hetero-geneity
McIntyre (1958)	NE Atlantic Inner Shelf	11-35 m	4.7-12.4°C	34.2-35.0‰	Bivalvia, Polychaeta	SF-DF	$1142/m^2$	3.9
Sanders (1960)	NW Atlantic Inner Shelf	19 m	2-22°C	29.5-32.5‰	Bivalvia, Polychaeta	DF	$8985/m^2$	2.5
Young and Rhoads (1971)	NW Atlantic Inner Shelf	12-42 m	-1.5-10°C	31.4‰	Polychaeta, Bivalvia, Amphipoda	SF-DF DF	$15\ 410/m^2$	3.1
Boesch (1972)	NW Atlantic Inner Shelf	4-30 m	0-30°C	-	-	?SF-DF	-	3.3
Lie (1968)	NE Pacific Inner Shelf	10-210 m	8-13.5°C	29.4-30.8‰	Bivalvia, Polychaeta	SF-DF	$1232\text{-}3150/m^2$	4.7
Sanders (1968)	Indian Ocean Tropical Shelf	2-37 m	-	-	Polychaeta, Bivalvia	-	-	4.2
Wade (1972)	Western Atlantic Tropical Shelf	6-16.5 m	27-31°C	34-36‰	Polychaeta, Bivalvia	DF	$240/m^2$	4.4
Sanders (1968)	North Atlantic Deep Sea	<2500 m	-	-	-	-	-	4.5
Paul and Menzies (1974)	Arctic Deep Sea	>900 m	-0.3--0.4°C	34.9-35.0‰	Polychaeta, Nematoda	SF	$4/m^2$	0.8

Heterogeneity Comparisons

Figure 33 indicates that the highest heterogeneity (5.5) and the highest mean heterogeneity (4.7) is found in the macrobenthos of Puget Sound. The wide range of heterogeneity values from this area indicates that a variety of habitats under various degrees of physical and biological stress was sampled. A slightly lower mean (4.5) and a much narrower heterogeneity range comes from the North Atlantic deep sea where habitat variety is reduced and environmental stability is maximum. However the heterogeneity values from this area are a known underestimate (Sanders, 1968) because only the polychaete-bivalve fraction, which made up about 78% of the population, was used. The shallow tropical areas of the North Atlantic and the Indian Ocean have similar maximum heterogeneity values (5.0, 5.1 respectively), and similar means (4.4, 4.2 respectively). The wider heterogeneity range of the Indian Ocean macrobenthos was explained by Sanders (1968), who suggested that the low heterogeneity of the Arabian Sea communities was caused by oxygen stress. If this stressed area is not considered, then the shallow water marine communities of the Indian Ocean exhibit a range similar to the deep sea, and a mean (4.8) slightly higher than Puget Sound. However, it must be remembered that Sanders' (1968) values are based only on the polychaete-bivalve fraction of the community. The outer continental shelf of the western North Atlantic Ocean exhibits a mean heterogeneity (4.3) very similar to the tropical macrobenthos, but its range is more in accord with the deep sea. The shallow shelf areas of the eastern and western North Atlantic have increasingly wider heterogeneity ranges and their mean values (3.9, 3.3 respectively) are much lower than other shelf areas considered so far. As one might predict from Sanders' (1968) theory of "continental climate boreal communities" in the western North Atlantic and "maritime climate boreal communities" in the eastern North Atlantic, heterogeneity is higher and the range is narrower on the shallow shelf off Scotland than off Virginia. Buzzards Bay and Cape Cod Bay have low mean heterogeneity (2.5, 3.1 respectively), but the Cape Cod Bay macrobenthos has a much narrower range. Tentative values calculated for Ellis' (1960) shallow water macrobenthic data from the Canadian Arctic fall into this range. The lowest heterogeneity among these areas occurs in the high Arctic deep

Figure 33. Heterogeneity, ranges and means. Macrobenthos ranked by means for selected studies from north polar, temperate, tropical, and deep sea marine environments. A: Shallow water tropics, Arabian Sea, 10–18°N, and Bay of Bengal, 13°N, Indian Ocean (mean H' = 4.2), Sanders (1968); B: Shallow water temperate, Puget Sound, 47°N, North Pacific Ocean (mean H' = 4.7), Lie (1968); C: Deep sea, North Atlantic Ocean (mean H' = 4.5), Sanders (1968); D: Shallow water tropics, Kingston Harbour, 18°N, North Atlantic Ocean (mean H' = 4.4), Wade (1972); E: Outer shelf of North Carolina, 35.5°N, 36.5°N, North Atlantic Ocean (mean H' = 4.3), Boesch (1972); F: Shallow water temperate shelf off Scotland, 57°N, North Atlantic Ocean (mean H' = 3.9), McIntyre (1958); G: Shallow water temperate shelf off Virginia, 37.5°N, North Atlantic Ocean (mean H' = 3.3), Boesch (1972); H: Shallow water temperate shelf, Cape Cod Bay, 42°N, North Atlantic Ocean (mean H' = 3.1), Young and Rhoads (1971); I: Shallow water temperate shelf, Buzzards Bay, 41.5°N, North Atlantic Ocean (mean H' = 2.5), Sanders (1960); J: Arctic abyss, 84–86°N, North Polar Ocean (mean H' = 0.8), Paul and Menzies (1974).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SPECIES HETEROGENEITY, WORLD OCEANS

sea where the mean heterogeneity is only 0.8. This cannot be attributed to instability of the physical environment, for Arctic deep sea is among the most constant environments known. It is more likely the result of insufficient food brought about by the generally low primary productivity of the North Polar Ocean. Shallow water macrobenthos northwards from Virginia into the Arctic exhibits wide heterogeneity ranges and low means which probably reflect the physical instability of the area. But the very low heterogeneity of the Arctic deep sea is more likely caused by insufficient food.

Among the Southern Ocean communities included in this comparison are the mixed suspension, deposit-feeding communities of southern Stewart Island and Cape Hallett, and the deposit-feeding communities of Campbell Island and Anvers Island. The communities from Cape Hallett and from southern Stewart Island have mean heterogeneity values (4.6, 4.5 respectively), which fall between values for the shallow shelf area of the northeastern Pacific Ocean and the deep sea. However the ranges are very narrow as in the deep sea. The deposit-feeding communities of Arthur Harbour and Perseverance Harbour also have high heterogeneity values. Arthur Harbour has a mean (4.1) which is just below the tropical mean heterogeneity values, and a very narrow range. This reflects the extreme stability of the environment. Perseverance Harbour exhibits a much wider range of values with a lower mean similar to a more stressed environment. If only the samples from the western end of the harbour are used, then the mean and the range are identical with Arthur Harbour, and the community from the eastern end compares in heterogeneity with the deposit-feeding community of Buzzards Bay. Consequently there appear to be no appreciable differences between the mean heterogeneity of macrobenthic communities on the shallow shelves of the northeastern Pacific Ocean, the tropical western North Atlantic and Indian Oceans, the Antarctic shelf, and the deep sea. The only areas which show appreciably lower heterogeneity are the boreal North Atlantic shelves and the Arctic deep sea. Information from the shallow water Canadian Arctic and western Greenland (Ellis, 1960) indicates a very wide range of heterogeneity values that overlap means from the high diversity areas of the deep sea, the tropics, and the Antarctic shelves. Nonetheless the mean is similar to North Atlantic boreal areas. The deep sea, the outer continental shelves, the tropics, discounting Sanders (1968) oxygen stress communities, and the Antarctic shelf exhibit narrow ranges while the shallow shelf areas of the North Atlantic, northeastern North Pacific, and the Arctic have very wide heterogeneity ranges. These differences may be caused by the past and present environmental stability of each particular area. A discussion of this follows.

Stability-Time Hypothesis

Sanders (1968) developed the *stability-time* hypothesis based on his studies in the North Atlantic and the Indian Oceans. The hypothesis views the soft bottom benthos along a gradient from predominantly "biologically accommodated" communities in which the environment is stable and species interactions control community diversity, to predominantly physically controlled communities where the environment is unstable and species evolve to accommodate the environment rather than each other. In Sanders' view, if the physical environment remains constant, biological stress becomes very important as time passes, and the resultant interactions (reduction of niche size, more specialization) form a system of biological accommodation.

The tropical areas of the western Atlantic and the Indian Oceans have remained climatically stable over a long period of time. Although, as Berggren and Hollister (1974) point out, the tropical marine faunas of the Caribbean-Antilles area and the Mediterranean-West African area were considerably reduced by decreasing temperature in the mid-late Miocene and during the Pliocene. The Antarctic shelf had a major change from a warm water to a cold water fauna beginning at the Eocene-Oligocene boundary 38 M.Y.B.P. (Kennett *et al.*, 1975) and some of the present species in the fauna had already evolved by the Miocene (Dell and Fleming, 1975). Temperatures on parts of the Antarctic shelf have been close to freezing since the early Oligocene and the major physical stress in the environment has probably been induced by advancing and receding ice shelves. With the advent of Antarctic bottom water (Kennett *et al.*, 1975) near the Eocene-Oligocene boundary the deep sea was also transformed from a relatively warm water to a cold water environment. This change may have stabilized rapidly, in a geological sense, and allowed the development of a cold water deep sea fauna under very stable environmental conditions. The situation in the North Atlantic Ocean must be considered in a different light. Berggren and Hollister (1974) considered that the development of the North Atlantic boreal fauna was initiated in the Paleocene (50 M.Y.B.P.) when cool Arctic water began to flow into the North Atlantic. However, since that time the physical environment has been very unstable. This culminated in the mid Pliocene, about 3 M.Y.B.P., with the beginning of the northern glaciation and the formation of the Labrador current. Since then polar fronts have advanced and receded regularly up to the present. In the last 250 000 years there have been six major glacial fluctuations between 60°N and 40°N (Berggren and Hollister, 1974). In addition, at the present time the close proximity of the cold Labrador current and the warm Gulf Stream in the western North Atlantic form a strong horizontal temperature gradient which compresses isotherms and causes a temperature range of about 29°C along the western North Atlantic seaboard.

The eastern North Pacific Ocean has been characterized by cool to warm temperate surface conditions from the late Oligocene to middle Miocene (Ingle, 1973). By the latest Miocene surface temperatures had dropped to 10°C as far south as 28°N. The early Pliocene climate brought subtropical conditions up to 40°N and Pliocene climates in general oscillated between warm temperate and subtropical along the shallow shelf of the eastern North Pacific. At the Pliocene-Pleistocene boundary subtropical conditions were represented at 40°N, but cool temperatures as low as 5°C occurred throughout the Pleistocene glacial period up to about 0.7 - 0.9 M.Y.B.P. when temperatures began to warm up to their present level of around 12°C to 14°C. Thus oscillations from subtropical to subarctic conditions have occurred along this coastline throughout the Tertiary, but the cool California current has acted as a buffer on the system since the Cretaceous (Ingle, 1973), maintaining relatively cool stable conditions for most of this period.

Based on Sanders' *stability-time* hypothesis one could expect macrobenthic diversity to decrease from the shallow water tropics to the deep sea to the Antarctic and Pacific shelves, and finally to lowest diversity on the North Atlantic shelves. However, heterogeneity values indicate little difference between the first four areas mentioned above and significant drops on the North Atlantic shelves and in the Arctic deep sea. It appears that within a relatively short length of time under relatively stable environmental conditions the macrobenthos will reach a maximum within-habitat diversity. Grassle and Sanders (1973) speak in terms of "at least thousands of years" for the development of a biologically accommodated community. Thus the Antarctic shelves and the deep sea are able to exhibit within-habitat diversity as high as that in the tropics which have been stable over a longer period of time. But the continental shelves of the North Atlantic which have been repeatedly besieged by advancing polar fronts (Berggren and Hollister, 1974) have not been able to attain comparable within-habitat heterogeneity. The high Arctic deep sea has a very low heterogeneity, the development of which has probably been stunted by a lack of food due to the large amount of ice cover which prevents light penetration and thereby inhibits primary productivity. Apollonio (1959) and English (1961) reported annual primary productivity values of less than 1 g C/m^2 in the Amerasian Basin. It may be safely assumed that during the Pleistocene, when glaciation was much more intense than at present, primary productivity in this area would be even less. In contrast, between-habitat diversity will continue to increase as long as environmental conditions remain stable, and food is available. Therefore the between-habitat diversity of the large and spatially disjunct tropical region is probably greater than the larger, though climatically younger, very stable deep sea, and certainly more diverse than the Antarctic shelf. Barnard (1961, 1962) has pointed out that each separate abyssal basin may contain its own endemic fauna. The 50 separate abyssal basins recognized by Heezen and Hollister (1971) make the deep sea a very disjunct area with a potentially high between-habitat diversity. But the continuous Antarctic shelf with its stable circumpolar environment may maintain much lower between-habitat heterogeneity and this is reflected by the large number of conspicuous circumantarctic species present in the fauna.

In tropical and temperate shelf zones bivalves and polychaetes make up a substantial part of the macrobenthos (Sanders, 1960, 1968; McIntyre, 1958; Wade, 1972). However in the deep sea (Sanders and Hessler, 1969; Hessler and Jumars, 1974) and on the Antarctic shelf, bivalve molluscs are essentially replaced by peracarid crustaceans. On the Antarctic shelf amphipods have become the most diverse peracarid group in the structure of the macrobenthos while in the deep sea isopods, tanaidaceans, and cumaceans become increasingly important (Sanders, Hessler, and Hampson, 1965; Jones and Sanders, 1972; Reyss, 1973; Hessler and Jumars, 1974). Nonetheless polychaetes are the most diverse group on the Antarctic shelf and in the deep sea. They make up very similar proportions of the macrobenthos in both the North Pacific and the North Atlantic abyss where they comprise 55% of the population, while peracarids contribute 25% to 33% and bivalves make up 4% to 7% (Hessler and Jumars, 1974). On the Antarctic shelf polychaetes make up 35% to 53% while peracarids contribute 16% to 50% and bivalves 1% to 5%. The proportional faunal composition of the Antarctic shelf and deep sea is in sharp contrast to temperate and tropical shelf zones where polychaetes and bivalves together usually make up at least 80% of the macrobenthos (Sanders, 1968).

The deep sea, except the Arctic, and the Antarctic shelf have similar within-habitat diversity. However, a comparison of deposit-feeding communities from both areas indicates that the deep sea is more heterogeneous. Both areas have similar proportions of component groups composed mainly of polychaetes and peracarids, but they have significantly different population densities due to differences in available food. Available food also appears to alter their trophic structure so that the deep sea has mainly deposit-feeding communities while the Antarctic shelf has rich mixed suspension, deposit-feeding communities plus deposit-feeding and suspension-feeding communities.

In summary, heterogeneity of the soft bottom macrobenthos appears similar in all areas so far studied except the North Atlantic and the Arctic abyss. However the cold water macrobenthos of the deep sea and the Antarctic shelf are similar in composition as are those of the tropical and the temperate areas. Population density is dependent on food from the overlying plankton so that the deep sea and the tropics are the most sparsely populated areas followed by the more densely populated temperate areas and the most densely populated Antarctic shelf.

SUMMARY

1. Since the North Atlantic marine biologists Thorson (1952) and Sanders (1968) held differing views on the concept of changes in macrobenthic diversity with latitude a transect was made between southern New Zealand, 47°S, and McMurdo Sound, 77°S, in the Ross Sea. Shallow water marine samples were obtained in order to determine how diversity of the macrobenthos varies with latitude in the Southern Ocean. From six stations: Port Pegasus, Stewart Island, 47°S, 167°E; Waterfall Inlet and Sandy Bay, Auckland Islands, 50°S, 166°E; Perseverance Harbour, Campbell Island, 52°S, 169°E; Arthur Harbour, Anvers Island, 64°S, 64°W; Moubray Bay, Victoria Land Coast, 72°S, 170°E; Cape Bird, Ross Island, 77°S, 166°E, 469 species and 61,559 individuals were examined.

2. Based on abundance and frequency of occurrence, the dominant species in the sampled communities are: Port Pegasus, the bivalve *Nucula dunedinensis* and the polychaete *Phyllochaetopterus socialis*; Auckland Islands, the polychaetes *Spiophanes* sp. A, *Euchone* sp. A, and the tanaidacean *Anatanais novaezelandiae*; Perseverance Harbour, the amphipod *Lembos* sp. 2 and the polychaete *Nicomache* sp.; Arthur Harbour, the amphipod *Ampelisca bouvieri* and the polychaete *Apistobranchus* sp.; Moubray Bay, the polychaetes *Spiophanes tcherniai* and *Potamilla antarctica*; Cape Bird, the ostracod *Philomedes heptathrix*, the actinarian *Edwardsia* sp., and the polychaete *Spiophanes tcherniai*.

3. The trophic structure of each community is determined based on the numerical percentage of suspension-feeders, and deposit-feeders. Three basic trophic structures are found in the six communities. Port Pegasus and Moubray Bay contain mixed suspension, deposit-feeding communities, Perseverance Harbour and Arthur Harbour contain deposit-feeding communities, and the Auckland Islands and Cape Bird contain suspension-feeding communities.

4. Heterogeneity, species richness, and species equitability show no correlation between macrobenthic diversity and latitude on the shallow shelf areas sampled. However, heterogeneity and species richness correlate well with trophic structure. Species

equitability shows no difference between mixed suspension, deposit-feeding communities and deposit-feeding communities, but suspension-feeding communities have lower equitability. This relationship indicates that mixed suspension, deposit-feeding communities are more diverse than deposit-feeding communities which, in turn, are more diverse than suspension-feeding communities. However, there is no difference in the diversity of a mixed suspension, deposit-feeding community on the Campbell Plateau or the Antarctic shelf and the same is true for deposit-feeding and suspension-feeding communities.

5. Dividing the communities into their major component parts revealed that the three most important groups in the macrobenthos along this particular transect are polychaete worms, peracarid crustaceans, and bivalve molluscs. Although polychaete species and numbers remain relatively constant with latitude, bivalve molluscs decrease in species and individuals with increasing latitude and peracarids increase. The decrease in bivalve species and numbers on the Antarctic shelf is attributed to low temperature, which affects larval reproduction, and to a very shallow calcium carbonate compensation depth, which affects shell construction and maintenance. Neither parameter appears to affect polychaetes or peracarids. As a result, peracarids, and to a lesser extent polychaetes, have effectively replaced bivalves in the shallow water macrobenthos of the Antarctic shelf.

6. Heterogeneity of the soft bottom macrobenthos from the continental shelves of the northeastern Pacific, the North Atlantic and the Indian Oceans, and the deep sea of the North Atlantic and North Polar Oceans is similar to the heterogeneity of the Southern Ocean macrobenthos. Within-habitat heterogeneity shows no substantial change in any of the areas compared (temperate northeastern Pacific, tropical Atlantic and Indian, abyssal North Atlantic, temperate Campbell Plateau, and the Antarctic shelf) except for the shallow water shelves of the North Atlantic and the Arctic deep sea, where it is substantially lower. This change in the within-habitat heterogeneity in the North Atlantic is the result of the unstable past and present environment in that area. The low heterogeneity

of the Arctic deep sea is thought to be caused by insufficient food input. Similarity in heterogeneity between the other areas studied is considered to be a result of the more stable past and present environments in those areas.

7. Within-habitat heterogeneity may reach a maximum level in a relatively short period of time in a stable environment (tens of thousands of years). However, between-habitat heterogeneity will continue to increase with time in a stable environment. Therefore, although within-habitat heterogeneity in the tropics is no higher than the deep sea (except the Arctic), the Antarctic, or the north-eastern Pacific, the between-habitat heterogeneity of this large spatially disjunct area is probably very high. Furthermore, although the fauna of the deep sea may be younger than the fauna of the Antarctic shelf, it probably has a higher between-habitat heterogeneity due to its more stable environment and spatially disjunct nature.

8. The deep sea (except the Arctic) and the Antarctic shelf have similar heterogeneity, and a similar percentage composition of major groups (polychaetes, peracarids, bivalves), however the Antarctic benthos is at least 23 times more densely populated. The similar percentage composition of the two areas is probably characteristic of cold water faunas, just as tropical and temperate faunas appear to have similar percentage composition of major groups.

9. It appears that the macrobenthos not only reflects its present day environment, but it also reflects the past. Consequently, due to past and present climatology and geography, the macrobenthos of the North Atlantic shelves and the Arctic deep sea have substantially lower diversity than other sampled areas. In these areas, the shallow water shelves of the eastern North Pacific, the tropical Indian and Atlantic Oceans, the Campbell Plateau and the Antarctic, plus the North Atlantic deep sea, macrobenthic diversity remains reasonably similar.

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APPENDIX I

List of species used in this study. Benthic collections were obtained from 47°S, North Arm, Port Pegasus, Stewart Island; 50°S, Waterfall Inlet and Sandy Bay, Auckland Islands; 52°S, Perseverance Harbour, Campbell Island; 64°S, Arthur Harbour, Anvers Island; 72°S, Moubray Bay, Cape Hallett; 77°S, Cape Bird, Ross Island.

Protozoa

Foraminifera
1 *Pelosina* sp.
2 *Psammosphaera* sp.

Cnidaria, Anthozoa

Actiniaria
3 *Edwardsia tricolor* Stucky
4 *Edwardsia* sp.

Alcyonaria
5 *Clavularia frankliniana* Molander
6 *Virgularia gracillima* Koelliker

Nimertinea

7 Nimertine 1
8 Nimertine 2
9 Nimertine 3
10 Nimertine 4

Priapulida

11 *Priapulus tuberculatospinosus* Baird

Nematoda

12 *Leptosomatum australe* Linstow
13 Nematode 1
14 Nematode 2
15 Nematode 3
16 Nematode spp.

Brachiopoda

17 Brachiopod 1
18 *Waltonia* sp.

Sipuncula

19 *Golfingia andersonni* (Théel)
20 *Golfingia ohlini* (Théel)
21 *Phascolosoma* sp.
22 Sipunculid 1
23 Sipunculid 2
24 Sipunculid 3
25 Sipunculid 4

Mollusca

Aplacophora
26 Solenogastre 1
27 Solenogastre 2
28 Solenogastre 3

Polyplacophora
29 Chiton 1

Gastropoda
30 *Cylichnina gelida* (Smith)
31 *Cylichnina striata* (Hutton)
32 *Lepeta antarctica* Smith
33 *Merelina* sp.
34 *Neobuccinum eatoni* (Smith)
35 *Philine alata* Thiele
36 *Philine* sp.
37 *Specula canaliculata* (Suter)
38 *Subonoba fumata* (Suter)
39 *Subonoba* spp.
40 *Uberella vitrea* (Hutton)

Bivalvia
41 *Ascitellina urinatoria* (Suter)
42 Bivalve 35
43 Bivalve 36
44 Bivalve 41
45 Bivalve 48
46 *Cyamiocardium denticulatum* (Smith)
47 *Cyamium problematicum* (Bernard)
48 *Cyclocardia antarctica* (Smith)
49 *Cyclocardia astartoides* (von Martens)
50 *Diplodonta globus* Finlay
51 *Diplodonta rakiura* (Powell)
52 *Hiatella australis* (Lamarck)
53 *Kidderia marshalli* Fleming
54 *Kellia nimrodiana* Hedley
55 *Laternula elliptica* (King and Broderip)
56 *Limatula hodgsoni* (Smith)
57 *Limatula suteri* (Dall)
58 *Limopsis lillei* Smith
59 *Maorithyas flemingi* Powell
60 *Melliteryx parva* (Deshayes)
61 *Monia zelandica* (Gray)
62 *Mysella unidentata* (Odhner)
63 *Nemocardium pulchellum* Iredale
64 *Notocallista multistriata* (Sowerby)
65 *Notolepton antipodum* (Filhol)
66 *Nucinella maorianus* (Hedley)
67 *Nucula dunedinensis* Finlay
68 *Nucula hartvigiana* Pfeiffer
69 *Nucula nitidula* A. Adams
70 *Nuculana bellula* (A. Adams)
71 *Paphia* sp.
72 *Parvithracia suteri* Finlay
73 *Perrierina aucklandica* (Powell)
74 *Pleuromeris marshalli* Marwick
75 *Solemya parkinsoni* Smith
76 *Tawera* sp. A
77 *Tawera* sp. B

78 *Thracia meridionalis* Smith
79 *Thyasira bongraini* (Lamy)
80 *Thyasira peroniana peregrina* Iredale
81 *Venerupis lagillierti* (Philippi)
82 *Yoldia eightsi* (Couthouy in Jay)

Scaphopoda
83 *Cadulus teliger* Finlay
84 *Dentalium zelandicum* (Sowerby)

Annelida

Polychaeta
85 *Aedicira belgicae* (Fauvel)
86 *Aglaophamus ornatus* Hartman
87 *Aglaophamus verrilli* (McIntosh)
88 *Aglaophamus* sp.
89 *Ammotrypane syringopyge* Ehlers
90 *Ammotrypane* sp.
91 *Ampharete kerguelensis* McIntosh
92 Ampharetid 121
93 Ampharetid 154
94 *Amphicteis* sp.
95 *Anaitides adarensis* Benham
96 *Anobothrus* sp.
97 *Aonides trifidus* Estcourt
98 *Apistobranchus* sp. A
99 *Apistobranchus* sp. B
100 Archiannelid 38
101 *Armandia maculata* (Webster)
102 *Artacama proboscidea* Malmgren
103 *Asychis* sp.
104 *Axiothella quadrimaculata* Augener
105 *Axiothella* sp. A
106 *Axiothella* sp. B
107 *Axiothella* sp. C
108 *Barrukia cristata* (Willey)
109 *Boccardia* sp.
110 *Branchiomma* sp. A
111 *Branchiomma* sp. B
112 *Capitella perarmata* (Gravier)
113 Capitellidae n.g.
114 *Chaetozone spinosa* Malmgren
115 Cirratulid 101
116 *Cirriformia* sp.
117 *Cossura* sp.
118 *Dasychone* sp.
119 *Dispio* sp.
120 *Dorvillea australiensis* (McIntosh)
121 *Dorvillea incerta* (Schmarda)
122 *Eteone aurantiaca* Schmarda
123 *Euchone pallida* Ehlers
124 *Euchone* sp. A
125 *Euchone* sp. B
126 *Euclymene* sp.
127 *Eulagisca corrientis* McIntosh
128 *Eulalia microphylla*
129 *Eulalia* sp. A
130 *Eulalia* sp. B
131 *Eulalia* sp. C
132 Eunicid 46
133 Eunicid 84

134 *Eunoe opalina* McIntosh
135 *Exogone heterosetosa* McIntosh
136 *Exogone miniscula* Hartman
137 *Fabricia* sp.
138 *Flabelligera gourdoni* Gravier
139 *Flabelligera mundata* Gravier
140 *Glycera capitata* Oersted
141 *Glycera tesselata* Grube
142 *Glycera* sp.
143 *Goniada maorica* Benham
144 *Grubianella* sp.
145 *Haploscoloplos kerguelensis* (McIntosh)
146 *Harmothoe* sp.
147 *Hemipodus simplex* (Grube)
148 Heterospionid 88
149 *Hyboscolex longiseta* Schmarda
150 *Isocirrus* sp.
151 *Jasmineira caeca* Ehlers
152 *Laeospira* sp.
153 *Lanicides bilobata* (Grube)
154 *Laonice cirrata* (Sars)
155 *Leaena* sp.
156 *Leodora perrieri* (Caullery and Mesnil)
157 *Lepidasthenia* sp.
158 *Lumbriclymenella robusta* Arwidsson
159 *Lumbrineris antarctica* Monro
160 *Lumbrineris brevicirra* (Schmarda)
161 *Lumbrineris galatheae* Knox and Green
162 *Lumbrineris magalhaensis* Kinberg
163 *Lumbrineris sphaerocephala* (Schmarda)
164 *Lycastis quadraticeps* Gay
165 *Maldane sarsi* Malmgren
166 Maldane sp.
167 Maldanid 125
168 *Melinnoides* sp.
169 *Micronephtys* sp.
170 *Myxicola* sp.
171 *Neosabellides elongatus* (Ehlers)
172 *Nereis cricognatha* Ehlers
173 *Nicomache* sp.
174 *Ninoe falklandica* Monro
175 *Notomastus latericeus* Sars
176 *Octobranchus antarcticus* Monro
177 *Onuphus* sp.
178 *Ophiodromus angustifrons* (Grube)
179 *Orbinia* sp. 56
180 Orbiniidae n.g.
181 Orbiniid 57
182 Orbiniid 108
183 *Oridia* sp.
184 *Paraonis gracilis* (Tauber)
185 *Phyllochaetopterus socialis* Claparède
186 *Phylo felix* Kinberg
187 *Pionosyllis comosa* Gravier
188 *Pionosyllis stylifera* Ehlers
189 *Pista* cf. *abyssicola* McIntosh
190 *Pista godfroyi* (Gravier)
191 *Polycirrus* sp.
192 *Potamilla antarctica* (Kinberg)

193 *Praxillella kerguelensis* (McIntosh)
194 *Praxillella* sp.
195 *Prionospio malmgreni* Claparède
196 *Prionospio* sp.
197 Phyllodocid 118
198 *Rhodine loveni* Malmgren
199 *Rhodine* sp.
200 Sabellid 78
201 Sabellid 142
202 *Scalibregma inflatum* Rathke
203 *Sclerocheilus* sp.
204 *Scolelepis antipoda* (Augener)
205 *Scoloplos marginatus* (Ehlers)
206 *Scoloplos ohlini* (Ehlers)
207 *Scoloplos* sp.
208 *Sphaerosyllis* sp.
209 *Spio obtusa* Ehlers
210 *Spio* sp. A
211 *Spio* sp. B
212 *Spiophanes tcherniai* Fauvel
213 *Spiophanes* sp. A
214 *Spiophanes* sp. B
215 *Streblosoma bairdi antarctica* Monro
216 *Stylaroides* sp.
217 *Syllidia inermis* (Ehlers)
218 *Syllis amica* Quatrefages
219 *Syllis cornuta* Rathke
220 *Syllis corsucans* Haswell
221 Syllid 69
222 Syllid 70
223 Syllid 85
224 Syllid 86
225 Syllid 120
226 Syllid 163
227 *Terebellides stroemii* Sars
228 *Tharyx epitoca* Monro
229 *Tharyx* sp.
230 *Thelepides koehleri* Gravier
231 *Thelepus* sp.
232 *Travisia kerguelensis* McIntosh
233 *Travisia olens* Ehers
234 *Typosyllis brachychaeta* (Schmarda)

Oligochaeta
235 *Torodrilus lowryi* Cook
236 Oligochaete 2
237 Oligochaete 3
238 Oligochaete 4

Hirudinea
239 Hirudinean 1

Arthropoda

Crustacea, Ostracoda

Myodocopa
240 *Azygocypridina zealanica* (Baird)
241 *Cycloberis tenera* (Brady)
242 *Empoulsenia antarctica* Kornicker
243 *Euphilomedes agilis* (Thomson)

244 *Muelleriella hispida* (Brady)
245 *Parasterope lowryi* Kornicker
246 *Philomedes assimilis* Brady
247 *Philomedes heptathrix* Kornicker
248 *Philomedes orbicularis* Brady
249 *Philomedes trithrix* Kornicker
250 *Scleroconcha gallardoi* Kornicker
251 *Streptoleberis arcuata* (Poulsen)
252 *Synasterope quadrata* (Brady)

Podocopa
253 *Neonesidea* sp.
254 Podocopid 6
255 Podocopid 7
256 Podocopid 8
257 Podocopid 18

Crustacea, Copepoda
258 Nauplius larvae

Cyclopoida
259 Cyclopoid 1
260 Cyclopoid 2

Harpacticoida
261 Idomene sp.
262 Harpacticoid 2
263 Harpacticoid 3

Crustacea, Phyllocarida

Nebaliacea
264 *Nebalia* sp.
265 *Nebaliella extrema* Thiele

Crustacea, Hoplocarida

Stomatopoda
266 *Heterosquilla tricarinata* (Claus)

Crustacea, Peracarida

Mysidacea
267 Mysid 1
268 Mysid 2
269 Mysid 3

Cumacea
270 *Campylaspis antarctica* Calman
271 *Cyclaspis argus* Zimmer
272 *Cyclaspis gigas* Zimmer
273 *Diastylis corniculata* Hale
274 *Diastylis helleri* Zimmer
275 *Diastylis neozelanica* Thomson
276 *Diastylis* sp. A
277 *Diastylis* sp. B
278 *Diastylopsis thileniusi* (Zimmer)
279 *Eudorella gracilior* Zimmer
280 *Eudorella splendida* Zimmer
281 *Eudorella* sp. A
282 *Eudorella* sp. B
283 *Heteroleucon* sp.
284 *Leptostylis crassicauda* Zimmer
285 *Leptostylis recalvastra* Hale

286 *Leucon antarctica* Zimmer
287 *Paralamprops* sp.
288 *Vaunthompsonia inermis* Zimmer
289 *Vaunthompsonia meridionalis* Sars

Tanaidacea
290 *Cyclopoapseudes diceneon* Gardiner
291 *Exspina* sp.
292 *Leptochelia tenuis* (Thomson)
293 *Leptognathia antarctica* Vanhöffen
294 *Leptognathia* sp. A
295 *Leptognathia* sp. B
296 *Nototanais antarcticus* Hodgson
297 *Nototanais dimorphus* Beddard
298 Tanaid 8
299 Tanaid 9
300 Tanaid 11
301 *Anatanais novaezealandiae* Thomson

Isopoda
302 *Acanthomunna* sp.
303 *Aega* sp.
304 *Antarcturus furcatus* (Studer)
305 Anthurid 15
306 Anthurid 17
307 Anthurid 20
308 *Antias charcoti* Richardson
309 *Astacilla fusiformis* Hale
310 *Astacilla tuberculata* (Thomson)
311 *Austrosignum glaciale* Hodgson
312 *Austrosignum grande* Hodgson
313 *Coulmannia* sp.
314 *Cymodoce antarctica* Hodgson
315 *Cymodoce australis* Hodgson
316 *Cirolana ? rossi* Miers
317 *Echinozone spinosa* Hodgson
318 *Ectias* sp.
319 *Eugerda* sp.
320 *Eurycope vicarius* Vanhöffen
321 *Eurycope* sp.
322 *Gnathia antarctica* (Studer)
323 *Haliacris antarctica* Pfeffer
324 *Ilyarachna* sp.
325 *Munna globicauda* Vanhöffen
326 *Munna neozelanica* Chilton
327 *Munna* sp.
328 *Neojaera furcata* (Hodgson)
329 *Notasellus australis* Hodgson
330 *Notoxenus spinifer* Hodgson
331 *Paramunna rostrata* (Hodgson)
332 *Paramunna glacialis* (Hodgson)
333 *Serolis polita* Pfeffer
334 Isopod 2
335 Isopod 4
336 Isopod 7
337 Isopod 25
338 Isopod 39

Amphipoda

339 *Aeginoides gaussi* Schellenberg
340 *Ampelisca bouvieri* Chevreux
341 *Ampelisca eschrichtii* Kroyer
342 *Ampelisca macrocephala* Liljeborg
343 *Ampelisca* sp. (Juv.)
344 Amphipod 172
345 *Atylopsis megalops* Nicholls
346 *Bathymedon* sp.
347 *Caprellina longicollis* (Nicolet)
348 *Caprellinoides mayeri* (Pfeffer)
349 *Ceradocus* sp.
350 Colomastigid 85
351 *Djerboa furcipes* Chevreux
352 *Epimeria inermis* Walker
353 *Epimeria macrodonta* Walker
354 *Epimeria robusta* K.H. Barnard
355 *Eusirus antarcticus* Thomson
356 *Gammaropsis georgianus* (Schellenberg)
357 *Gammaropsis longicornis* Walker
358 *Gammaropsis* sp. A
359 *Gammaropsis* sp. B
360 *Gammaropsis* sp. C
361 *Gammaropsis* (*Megamphopus*) sp. D
362 *Gitanopsis inaequipes* Schellenberg
363 *Gitanopsis* sp.
364 *Gnathiphimedia sexdentata* (Schellenberg)
365 *Gondogeneia georgiana* (Pfeffer)
366 *Gondogeneia subantarctica* (Stephensen)
367 *Halice sublittoralis* Lowry, ms.
368 *Haplocheira barbimana* (Thomson)
369 *Haplocheira* sp.
370 *Harpinia* sp. A
371 *Harpinia* sp. B
372 *Harpiniopsis* sp.
373 *Heterophoxus videns* K.H. Barnard
374 *Hippomedon macrocephalus* Bellan-Santini
375 *Iphimediella cyclogena* K.H. Barnard
376 *Iphimediella margueritei* Chevreux
377 *Jassa falcata* (Montagu)
378 *Kuphocheira setimanus* K.H. Barnard
379 *Lembos* sp. 1
380 *Lembos* sp. 2
381 *Liagoceradocus* sp.
382 *Liljeborgia* cf. *georgiana* Schellenberg
383 *Liljeborgia* sp. A
384 *Liljeborgia* sp. B
385 Lysianassidae n.g.
386 *Maxilliphimedia longipes* (Walker)
387 *Metaleptamphopus pectinatus* Chevreux
388 *Metaphoxus* sp.
389 *Methalimedon nordenskjoldi* Schellenberg
390 *Monoculodes* cf. *abacus* J.L. Barnard
391 *Monoculodes scabriculosus* K.H. Barnard
392 *Monoculodes* sp.
393 *Neoxenodice cryophile* Lowry, ms.
394 Oedicerotid 79
395 Oedicerotid 80
396 *Oediceroides calmani* Walker

397 *Oradarea rossi* Thurston
398 *Oradarea tricarinata* K.H. Barnard
399 *Oradarea unidentata* Thurston
400 *Orchomene arnaudi* Bellan-Santini
401 *Orchomene franklini* (Walker)
402 *Orchomene penguides* (Walker)
403 *Orchomene* sp. A
404 *Orchomene* sp. B
405 *Orchomene* sp. C
406 *Pachychelium* sp.
407 Pagetinidae n.g.
408 *Panoploea joubini* Chevreux
409 *Paradexamine pacifica* (Thomson)
410 *Paramoera fasciculata* (Thomson)
411 *Paramoera* sp.
412 *Paraphoxus uncinatus* Chevreux
413 *Paraphoxus* sp.
414 *Parawaldeckia* sp.
415 *Parepimeriella* sp.
416 *Pariphimedia integricauda* Chevreux
417 *Photis nigrocula* Lowry, ms.
418 *Photis phaeocula* Lowry, ms.
419 *Phoxocephalus regium* K.H. Barnard
420 *Phoxocephalus* sp.
421 *Pontogeneiella levis* (Thomson)
422 *Proboloides antarcticus* Walker
423 *Proboloides typicus* (Walker)
424 *Proharpinia hurleyi* J.L. Barnard
425 *Prostebbingia* cf. *gracilis* (Chevreux)
426 *Pseudoprotomima* sp.
427 *Schraderia* cf. *dubia* Thurston
428 *Schraderia gracilis* Pfeffer
429 *Syrrhoe* cf. *psychrophila* Monod
430 *Thaumatelson herdmani* Walker
431 *Tiron* sp.
432 *Tryphosella* sp. A
433 *Tryphosella* sp. B
434 *Uristes murrayi* Walker
435 *Uristes* sp.
436 *Urothoe* sp. A
437 *Urothoe* sp. B
438 *Urothoe* sp. C
439 *Urothoe* sp. D
440 *Wandelia crassipes* Chevreux

Crustacea, Eucarida

Decapoda
441 *Callianassa filholi* Milne Edwards
442 *Munida subrugosa* (White)
443 *Nauticaris marionis* Bate
444 *Nectocarcinus bennetti* Takeda and Miyake
445 Pagurid 1
446 Pagurid 2
447 *Paramithrax ? peronii* Milne Edwards
448 *Pontophilus australis* (Thomson)
449 *Pontophilus quadrispinosus* Yaldwyn

Pycnogonida
450 *Achelia communis* (Bouvier)
451 *Austroraptus praecox* Calman
452 *Nymphon australe* Hodgson
453 Pycnogonid 1

Echinodermata

Asteroidea
454 *Odontaster validus* Koehler

Holothuroidea
455 Holothurian 1

Echinoidea
456 *Abatus* sp.
457 *Rhynchocidaris triploplora* Mortensen
458 *Sterechinus neumayeri* (Meissner)

Ophiuroidea
459 *Amphiura algida* Koehler
460 *Amphiura belgicae* Koehler
461 *Ophionotus victoriae* Bell
462 Ophiuroid 1
463 Ophiuroid 2
464 Ophiuroid 3
465 Ophiuroid 4

Chordata

Ascidiacea
466 *Eugyra kerguelenensis* Herdman
467 *Pyura* sp.
468 Tunicate 1
469 Tunicate 2

APPENDIX II

Breakdown of community trophic structure by species for each station in the study. The placement of species into feeding types is based on the work of Cannon (1933), Enequist (1949), Barnard (1962), Kanneworff (1965), Dales (1967), Day (1967), Mills (1967), Meglitsch (1972), Kornicker (1975), plus personal communication with Professor G.A. Knox and Dr L.S. Kornicker.

PORT PEGASUS, 47°S	Number of individuals
SUSPENSION-FEEDERS	
Bivalvia	
Arcoida	
Nucinellidae	
Nucinella maorianus	34
Pterioida	
Anomiidae	
Monia zelandica	1
Limidae	
Limatula suteri	70
Veneroida	
Cardiidae	
Nemocardium pulchellum	2
Carditidae	
Pleuromeris marshalli	6
Erycinidae	
Melliteryx parva	1
Thyasiridae	
Thyasira peroniana peregrina	9
Ungulinidae	
Diplodonta globus	17
Diplodonta rakiura	55
Veneridae	
Notocallista multistriata	1
Pholadomyoida	
Thraciidae	
Parvithracia suteri	9
Peracarida	
Mysidacea	
Mysid 1	5
Mysid 2	2
Amphipoda	
Pardaliscidae	
Halice sublittoralis	25

Polychaeta	
Sedentaria	
Chaetopteridae	
Phyllochaetopterus socialis	102
Sabellidae	
Branchiomma sp.	1
Euchone sp. A	4
Euchone sp. B	5
Spionidae	
Boccardia sp.	11
Spio sp.	4
Anthozoa	
Alcyonaria	
Virgularia gracillima	1
Brachiopoda	
Articulata	
Brachiopod 1	2
Waltonia sp.	1
Decapoda	
Callianassidae	
Callianassa filholi	4
Ascidiacea	
Tunicate 1	1
Tunicate 2	2
	375

DEPOSIT-FEEDERS

Bivalvia	
Nuculoidea	
Nuculidae	
Nucula dunedinensis	244
Nuculanidae	
Nuculana bellula	5
Solemyoida	
Solemyidae	
Solemya parkinsoni	82
Peracarida	
Cumacea	
Diastylidae	
Diastylis neozelanica	1
Diastylopsis thileniusi	1
Leptostylis recalvastra	5
Tanaidacea	
Leptochelia tenuis	5
Amphipoda	
Corophiidae	
Aorcho sp.	1
Gammaropsis sp.	5
Photis nigrocula	1

Gammaridae	
Ceradocus sp.	11
Liljeborgiidae	
Liljeborgia sp.	2
Lysianassidae	
Pachychelium sp.	3
Oedicerotidae	
Oedicerotid 80	5
Phoxocephalidae	
Phoxocephalus regium	21
Polychaeta	
Sedentaria	
Ampharetidae	
Amphicteis sp.	1
Capitellidae	
Notomastus latericeus	20
Cirratulidae	
Cirratulus sp. 41	5
Cirriformia sp.	1
Cossuridae	
Cossura sp.	18
Maldanidae	
Maldane sp.	101
Nicomache sp.	2
Praxillella sp.	13
Rhodine sp.	2
Opheliidae	
Armandia maculata	4
Orbiniidae	
Orbiniid 57	12
Orbinia sp. 56	2
Spionidae	
Prionospio malmgreni	1
Scolelepis antipoda	2
Terebellidae	
Artacama proboscidea	2
Leaena sp.	4
Trichobranchidae	
Terebellides stroemii	14
Miscellaneous	
Echinodermata	
Holothuroida	
Holothurian	2
Scaphopoda	
Dentaliidae	
Dentalium zelandicum	6
Siphonodentaliidae	
Cadulus teliger	2
Sipunculoida	
Phascolosoma sp.	8
Sipunculid 2	4
	617

REMAINDER (Omnivores, Carnivores, Scavengers)

Peracarida	
Amphipoda	
Phtisicidae	
Pseudoprotomima sp.	3
Polychaeta	
Errantia	
Eunicidae	
Dorvillea australis	1
Dorvillea incerta	17
Eunicid 46	1
Ninoe falklandica	1
Lumbrineridae	
Lumbrineris galatheae	2
Lumbrineris magalhaensis	49
Nephtyidae	
Aglaophamus verrilli	1
Phyllodocidae	
Eteone sp.	1
Polynoidae	
Lepidasthenia sp.	10
Syllidae	
Exogone heterosetosa	49
Syllid 85	17
Miscellaneous	
Decapoda	
Caridea	
Crangonidae	
Pontophilus australis	1
Brachyura	
Majidae	
Paramithrax ? peronii	1
	154

AUCKLAND ISLANDS, 50°S

SUSPENSION-FEEDERS

Bivalvia	
Veneroida	
Cyamiidae	
Cyamium problematicum	415
Kidderia marshalli	17
Perrierina aucklandica	4414
Lasaeidae	
Mysella unidentata	196
Ungulinidae	
Diplodonta rakiura	87

Veneridae	
Tawera sp. B	2
Venerupis lagillierti	1
Peracarida	
Mysidacea	
Mysid 3	26
Amphipoda	
Corophiidae	
Haplocheira barbimana	1
Polychaeta	
Sedentaria	
Sabellidae	
Euchone sp. A	2240
Spionidae	
Boccardia sp.	916
Spio sp.	617
Spiophanes sp. A	4032
Miscellaneous	
Anthozoa	
Actinaria	
Edwardsiidae	
Edwardsia tricolor	20
	12 948

DEPOSIT-FEEDERS

Bivalvia	
Nuculoidea	
Nuculidae	
Nucula dunedinensis	3
Nucula nitidula	25
Solemyoida	
Solemyidae	
Solemya parkinsoni	7
Peracarida	
Cumacea	
Diastylidae	
Diastylis neozelanica	1150
Leuconidae	
Heteroleucon sp.	17
Tanaidacea	
Tanaidae	
Anatanais novaezealandiae	1649
Tanaid 8	33
Apseudidae	
Cyclopapseudes diceneon	3
Isopoda	
Munnida	
Munna neozelanica	10

Amphipoda	
Corophiidae	
Lembos sp. 2	314
Dexaminidae	
Paradexamine pacifica	3
Eusiridae	
Gondogeneia subantarctica	4
Paramoera fasciculata	2
Pontogeneiella levis	1
Haustoriidae	
Urothoe sp. B	29
Ischyroceridae	
Jassa falcata	1
Lysianassidae	
Parawaldeckia sp.	81
Oedicerotidae	
Bathymedon sp.	16
Oedicerotid 80	9
Phoxocephalidae	
Paraphoxus sp.	110
Phoxocephalus regium	67
Synopiidae	
Tiron sp.	38
Polychaeta	
Sedentaria	
Capitellidae	
Capitellid n.g. n.sp.	93
Notomastus latericeus	75
Cirratulidae	
Cirratulid 101	151
Maldanidae	
Axiothella quadrimaculata	261
Euclymene sp.	130
Opheliidae	
Armandia maculata	19
Travisia olens	16
Orbiniidae	
Orbiniid n.g. n.sp.	17
Phylo felix	1
Spionidae	
Aonides trifidus	117
Prionospio malmgreni	70
Miscellaneous	
Oligochaete 2	12
Oligochaete 3	151
Sipunculid 3	3
Solenogastre 2	1
	4689

REMAINDER (Omnivores, Carnivores, Scavengers)

Peracarida			
	Amphipoda		
	Phtiscidae		
		Caprellina longicollis	142
Polychaeta			
	Errantia		
	Glyceridae		
		Glycera tesselata	1
		Hemipodus simplex	3
	Hesionidae		
		Ophiodromus angustifrons	1
	Lumbrineridae		
		Lumbrineris galatheae	1
		Lumbrineris magalhaensis	41
		Lumbrineris sphaerocephala	55
	Nereidae		
		Nereis cricognatha	55
	Syllidae		
		Exogone heterosetosa	615
		Syllis cornuta	79
		Syllid 120	1
Miscellaneous			
Hoplocarida			
	Stomatopoda		
	Lysiosquillidae		
		Heterosquilla tricarinata	7
Eucarida			
	Decapoda		
	Portunidae		
		Nectocarcinus bennetti	21
Pycnogonida			
		Pycnogonid 1	4
			1025

PERSEVERANCE HARBOUR, 52°S

SUSPENSION-FEEDERS

Bivalvia			
	Pterioida		
	Anomiidae		
		Monia zelandica	1
	Veneroida		
	Cardiidae		
		Nemocardium pulchellum	1

Kelliellidae	
Notolepton antipodum	23
Thyasiridae	
Maorithyas flemingi	9
Peracarida	
Mysidacea	
Mysid 3	2
Amphipoda	
Corophiidae	
Haplocheira barbimana	5
Polychaeta	
Sedentaria	
Spionidae	
Boccardia sp.	235
Spiophanes sp. A	14
Miscellaneous	
Anthozoa	
Actinaria	
Edwardsiidae	
Edwardsia tricolor	9
	299

DEPOSIT-FEEDERS

Bivalvia	
Nuculoidea	
Nuculidae	
Nucula hartvigiana	13
Solemyoida	
Solemyidae	
Solemya parkinsoni	3
Peracarida	
Cumacea	
Leuconidae	
Eudorella sp. A	13
Tanaidacea	
Tanaid 9	41
Amphipoda	
Amphilochidae	
Gitanopsis sp.	1
Corophiidae	
Gammaropsis sp.	17
Lembos sp. 2	266
Eusiridae	
Gondogeneia subantarctica	1
Haustoriidae	
Urothoe sp. B	42
Liljeborgiidae	
Liljeborgia sp. B	2

Lysianassidae	
Tryphosella sp. A	7
Oedicerotidae	
Bathymedon sp.	18
Phoxocephalidae	
Phoxocephalus regium	65
Proharpinia hurleyi	105
Polychaeta	
Sedentaria	
Capitellidae	
Capitellid n.g. n.sp.	3
Notomastus lătericeus	22
Cirratulidae	
Cirriformia sp.	28
Maldanidae	
Maldane sp.	43
Nicomache sp.	155
Praxillella sp.	15
Opheliidae	
Armandia maculata	4
Paraonidae	
Paraonis gracilis	48
Scalibregmidae	
Hyboscolex longipes	1
Spionidae	
Prionospio malmgreni	12
Scolelepis antipodum	1
Trichobranchidae	
Terebellides stroemii	61
Miscellaneous	
Priapuloida	
Priapulus tuberculatospinosus	2
Oligochaeta	
Oligochaete 3	3
Sipunculoida	
Sipunculid 4	1
	993

REMAINDER (Omnivores, Carnivores, Scavengers)

Peracarida	
Isopoda	
Cirolanidae	
Cirolana cf. *rossi*	7
Polychaeta	
Errantia	
Lumbrineridae	
Lumbrineris magalhaensis	4

Nereidae	
Nereis cricognatha	1
Polynoidae	
Harmothoe sp.	1
Syllidae	
Pionosyllis stylifera	34
Miscellaneous	
Decapoda	
Munida subrugosa	1
Pagurid (juv.)	1
	49

ARTHUR HARBOUR, 64°S

SUSPENSION-FEEDERS

Bivalvia	
Arcoida	
Limopsidae	
Limopsis lillei	1
Veneroida	
Carditidae	
Cyclocardium astaroides	2
Perrierinidae	
Cyamiocardium denticulatum	1
Thyasiridae	
Thyasira bongraini	13
Pholadomyoida	
Laternulidae	
Laternula elliptica	1
Peracarida	
Amphipoda	
Ampeliscidae	
Ampelisca bouvieri	476
Ampelisca eschrichtii	5
Corophiidae	
Haplocheira sp.	21
Kuphocheira setimanus	40
Miscellaneous	
Ascidiacea	
Pleurogona	
Molgulidae	
Eugyra kerguelensis	7
	576

DEPOSIT-FEEDERS

Bivalvia	
Nuculoidea	
Nuculanidae	
Yoldia eightsi	52
Peracarida	
Cumacea	
Bodotriidae	
Vaunthompsonia inermis	5
Vaunthompsonia meridionalis	3
Diastylidae	
Diastylis sp.	5
Leuconidae	
Eudorella sp.	258
Tanaidacea	
Paratanaidae	
Leptognathia sp. A	28
Nototanais antarcticus	14
Isopoda	
Munnidae	
Haliacris antarcticus	2
Amphipoda	
Corophiidae	
Gammaropsis (*Megamphopis*) sp. D	323
Eusiridae	
Schraderia gracilis	2
Haustoriidae	
Urothoe sp. C	25
Lysianassidae	
Uristes sp.	1
Oedicerotidae	
Methalimedon nordenskjoldi	64
Monoculodes scabriculosus	1
Monoculodes sp.	27
Phoxocephalidae	
Harpinia sp. A	142
Harpinia sp. B	10
Harpiniopsis sp.	73
Paraphoxus uncinatus	1
Polychaeta	
Sedentaria	
Apistobranchidae	
Apistobranchus sp. A	406
Capitellidae	
Capitella perarmata	143
Cirratulidae	
Tharyx epitoca	10
Flabelligeridae	
Flabelligera gourdoni	1
Maldanidae	
Axiothella sp. A	45
Lumbriclymenella robusta	16
Maldane sarsi	6
Praxillella kerguelensis	3
Rhodine loveni	64

Opheliidae	
Ammotrypane sp.	40
Brada villosa	2
Orbiniidae	
Haploscoloplos kerguelensis	115
Paraonidae	
Paraonis gracilis	102
Terebellidae	
Artacama proboscidea	10
Polycirrus sp.	20
Thelepus koehleri	2
Trichobranchidae	
Octobranchus antarcticus	17
Terebellides stroemii	14
Miscellaneous	
Ostracoda	
Myodocopa	
Philomedidae	
Philomedes orbicularis	18
Oligochaeta	
Tubificidae	
Torodrilus lowryi	180
	2228

REMAINDER (Omnivores, Carnivores, Scavengers)

Polychaeta	
Errantia	
Nephtyidae	
Aglaophamus ornatus	27
Lumbrineridae	
Lumbrineris antarcticus	3
Polynoidae	
Eunoe opalina	2
Barrukia cristata	6
	38

CAPE HALLETT, 72°S

SUSPENSION-FEEDERS

Bivalvia	
Arcoida	
Limopsidae	
Limopsis sp.	6
Pterioida	
Limidae	
Limatula hodgsoni	12

Veneroida	
Carditidae	
Cyclocardium antarctica	6
Thyasiridae	
Thyasira bongraini	140
Peracarida	
Isopoda	
Arcturidae	
Antarcturus furcatus	3
Amphipoda	
Ampeliscidae	
Ampelisca macrocephala	26
Polychaeta	
Sedentaria	
Sabellidae	
Branchiomma sp.	3
Euchone pallida	1
Fabricia sp.	2
Jasmineira caeca	14
Myxicola sp.	416
Potamilla antarctica	208
Spionidae	
Spiophanes tcherniai	311
Miscellaneous	
Anthozoa	
Actinaria	
Edwardsiidae	
Edwardsia sp.	3
Ostracoda	
Myodocopa	
Empoulsenia antarctica	2
	1153

DEPOSIT-FEEDERS

Bivalvia	
Nuculoidea	
Nuculanidae	
Yoldia eightsi	6
Peracarida	
Cumacea	
Diastylidae	
Diastylis helleri	1
Leptostylis crassicauda	1
Leuconidae	
Eudorella gracilior	1
Leucon antarctica	101

Tanaidacea	
Paratanaidae	
Nototanais antarctica	4
Leptognathia antarctica	80
Tanaid 11	20
Isopoda	
Ilyarachnidae	
Echinozone spinosa	11
Janiridae	
Neojaera antarctica	5
Notosellus australis	1
Munnidae	
Munna globicauda	2
Munna sp.	3
Paramunna glacialis	5
Paramunna rostrata	8
Amphipoda	
Acanthonotozomatidae	
Iphimediella cyclogena	1
Iphimediella margueritei	1
Maxilliphimedia longipes	1
Amphilochidae	
Gitanopsis squamosus	2
Corophiidae	
Gammaropsis georgianus	1
Gammaropsis longicornis	17
Gammaropsis sp.	4
Eusiridae	
Atylopsis megalops	3
Oradarea tridentata	1
Oradarea unidentata	1
Oradarea sp.	1
Prostebbingia cf. *gracilis*	5
Schraderia cf. *dubia*	1
Schraderia cf. *gracilis*	7
Haustoriidae	
Urothoe sp. D	7
Liljeborgiidae	
Liljeborgia cf. *georgiana*	3
Lysianassidae	
Orchomene arnaudi	1
Orchomene franklini	114
Orchomene sp.	1
Uristes murrayi	8
Oedicerotidae	
Monoculodes cf. *abacus*	10
Monoculodes scabriculosus	5
Paramphithoidae	
Epimeria inermis	1
Epimeria macrodonta	1
Phoxocephalidae	
Heterophoxus videns	49
Metaphoxus sp.	99
Pleustidae	
Parepimeriella sp.	2
Stenothoidae	
Proboloides antarcticus	6
Thaumatelson herdmani	1

Polychaeta	
Sedentaria	
Ampharetidae	
Ampharete kerguelensis	2
Neosabellides elongatus	123
Apistobranchidae	
Apistobranchus sp. B	27
Cirratulidae	
Chaetozone spinosa	41
Tharyx sp.	6
Flabelligeridae	
Flabelligera mundata	1
Maldanidae	
Asychis sp.	9
Axiothella quadrimaculata	3
Maldane sarsi	113
Praxillella sp.	11
Rhodine loveni	1
Opheliidae	
Ammotrypane syringopyge	9
Travisia kerguelensis	7
Orbiniidae	
Haploscoloplos kerguelensis	34
Scoloplos marginatus	18
Paraonidae	
Aedicira belgicae	35
Paraonis gracilis	44
Scalibregmidae	
Scalibregma inflatum	1
Spionidae	
Laonice cirrata	85
Terebellidae	
Lanicides bilobata	1
Pista godfroyi	1
Streblosoma bairdi antarctica	1
Trichobranchidae	
Terebellides stroemii	6
Miscellaneous	
Aplacophora	
Solenogastre 3	7
Oligochaeta	
Tubificidae	
Torodrilus lowryi	115
Oligochaete 4	22
Ostracoda	
Myodocopa	
Philomididae	
Philomedes assimilis	1
Philomedes orbicularis	26
Scleroconcha gallardoi	1
Sipunculid	
Golfingia ohlini	35
	1389

REMAINDER (Omnivores, Carnivores, Scavengers)

Peracarida	
Cumacea	
Bodotriidae	
Camylaspis antarctica	4
Cyclaspis gigas	2
Amphipoda	
Phtiscidae	
Aeginoides gaussi	2
Caprellinoides mayeri	23
Podoceridae	
Neoxenodice cryophile	54
Polychaeta	
Errantia	
Glyceridae	
Glycera capitata	9
Hesionidae	
Syllidia inermis	21
Lumbrineridae	
Lumbrineris antarctica	1
Lumbrineris magalhaensis	29
Nephtyidae	
Aglaophamus ornatus	5
Phyllodocidae	
Anaitides adarensis	6
Eteone aurantiaca	2
Polynoidae	
Barrukia cristata	3
Syllidae	
Exogone miniscula	11
Pionosyllis comosa	2
Syllis amica	2
Typosyllis brachychaeta	8
Miscellaneous	
Pycnogonida	
Achelia communis	5
Nymphon australe	64
	253

CAPE BIRD, 77°S

SUSPENSION-FEEDERS

Bivalvia	
Pholadomyoida	
Laternulidae	
Laternula elliptica	48
Bivalve 36	14

Peracarida	
Amphipoda	
Corophiidae	
Haplocheira sp.	63
Polychaeta	
Sedentaria	
Sabellidae	
Potamilla antarctica	54
Spionidae	
Spiophanes tcherniai	10 943
Spiophanes sp. B	5
Miscellaneous	
Anthozoa	
Actinaria	
Edwardsiidae	
Edwardsia sp.	6017
Alcyonaria	
Clavulina frankiniana	12
Ostracoda	
Myodocopa	
Empoulsenia antarctica	22
	17 178

DEPOSIT-FEEDERS

Bivalvia	
Nuculoidea	
Nuculanidae	
Yoldia eightsi	94
Peracarida	
Cumacea	
Diastylidae	
Diastylis helleri	100
Diastylis sp. B	3
Leuconidae	
Eudorella splendida	775
Tanaidacea	
Paratanaidae	
Nototanais dimorphus	2114
Isopoda	
Antiasidae	
Antias charcoti	1
Munnidae	
Austrosignum glaciale	852
Austrosignum grande	511
Notoxenus spinifer	23
Paramunna glacialis	2

Amphipoda	
Corophiidae	
Gammaropsis longicornis	130
Eusiridae	
Oradarea rossi	18
Lysianassidae	
Hippomedon macrocephala	4
Orchomene franklini	451
Orchomene penguides	24
Oedicerotidae	
Monoculodes sp.	89
Oediceroides calmani	1
Phoxocephalidae	
Heterophoxus videns	578
Stenothoidae	
Proboloides typicus	50
Polychaeta	
Sedentaria	
Cirratulidae	
Tharyx sp.	374
Orbiniidae	
Haploscoloplos kerguelensis	178
Maldanidae	
Axiothella sp. C	9
Maldanid 125	75
Praxillella kerguelensis	129
Spionidae	
Spio obtusa	1
Miscellaneous	
Priapuloida	
Priapulus tuberculatospinosus	11
Oligochaeta	
Tubificidae	
Torodrilus lowryi	184
Oligochaete 4	102
Sipunculoida	
Golfingia andersonni	109
Ostracoda	
Myodocopa	
Philomedidae	
Philomedes assimilis	359
Philomedes heptathrix	6783
Philomedes orbicularis	45
	14 179

REMAINDER (Omnivores, Carnivores, Scavengers)

Peracarida	
Amphipoda	
Podoceridae	
Neoxenodice cryophile	156

Polychaeta	
Errantia	
Hesionidae	
Syllidia inermis	6
Lumbrineridae	
Lumbrineris magalhaensis	1
Nephtyidae	
Aglaophamus ornatus	5
Phyllodocidae	
Eulagisca corrientis	6
Polynoidae	
Barrukia cristata	4
Miscellaneous	
Gastropoda	
Neobuccinum eatoni	1
Asteroida	
Odontaster validus	1
	180

Studies on the Macrobenthos
of the Southern Ocean. 2.
Zoogeography of the Antarctic
and Subantarctic Amphipoda
and Polychaeta.

The following work is my contribution to a larger study of which Professor G.A. Knox is the senior author. It was presented by Professor Knox at the SCOR/SCAR Symposium on Polar Seas held at Montreal in May 1974, and it will be published in full in the proceedings of the symposium under the title, *A Comparison between the Benthos of the Southern Ocean and the North Polar Ocean with Special Reference to the Amphipoda and Polychaeta.* I wish to thank Professor Knox for allowing me to use this section of the paper in my thesis.

ABSTRACT

The zoogeographic distribution of 450 species of Amphipoda and 550 species of Polychaeta which occur south of 50°S latitude is categorized using an affinity index and a matrix analysis. The Amphipoda are arranged into four distinct areas; the Subantarctic, the Magellanic, the Scotia, and the East Antarctic. The Polychaeta fall into three areas; the Subantarctic, the Magellanic, and the Antarctic. Differences in family composition and species endemicity between areas are examined for each faunule and relative ages and possible origins of the Amphipoda and Polychaeta of the Southern Ocean are discussed. Evidence for the dispersal of the Subantarctic Amphipoda from South America via the West Wind Drift is put forward.

CONTENTS

Zoogeography of the Antarctic and Subantarctic Amphipoda and Polychaeta

James K. Lowry

INTRODUCTION

Ideally biogeographic syntheses should be based on the analysis of distribution patterns of whole communities of organisms (Knox, 1960, 1970). So far this has not been attempted for the benthic flora and fauna of the Antarctic and Subantarctic, apart from an analysis of the zonation patterns of the littoral zone (Knox, 1960). Indeed the task of assembling the necessary data from the considerable volume of taxonomic literature on the benthos of the Southern Ocean would be a prodigious one. Although many areas are still inadequately known the benthic fauna of this ocean has probably been more intensively sampled than many other oceans. Scientific reports from the Belgian Antarctic Expedition 1897-1899, the Swedish South Polar Expedition 1901-1903, the French Antarctic Expeditions 1903-1905 and 1908-1910, the German South Polar Expedition 1901-1903, the National Antarctic Expedition 1901-1904, the British Antarctic (*Terra Nova*) Expedition 1910-1913, and the Discovery Expedition 1925, form the basis of our knowledge of the Antarctic benthos. Since 1956 there has been an intensification of activity, notable among which have been the three Soviet Antarctic expeditions to the eastern quadrat (1955, 1958, 1959) in the *Ob* (Uschakov, 1962), the United States *Eltanin* cruises (Sandved, 1966; El-Sayed, 1973; Hartman, 1967), and the New Zealand Oceanographic Institute's investigations in the Ross Sea (Bullivant and Dearborn, 1967).

Most zoogeographic studies of the Southern Ocean benthos have in the main been concerned with the simple compilation of lists and the plotting of species distributions from a single taxonomic group. It was therefore decided to carry out a detailed distributional analysis by computer using an affinity index to compare a series of selected regions in the Southern Ocean south of 50°S. The use of the computer has enabled the handling and synthesis of several thousand records and the determination of relationships in an objective manner.

Two groups of animals have been selected for the analysis, the Amphipoda and the Polychaeta. This selection reflects the fact that Professor Knox and I are currently working on the taxonomy of these groups in Antarctic waters (Knox and Cameron, in press; Lowry, Parts 3, 5 of this thesis) and also their suitability for such an analysis. Both have been intensively studied in Antarctic waters, their taxonomy is reasonably stable and most important, they are dominant forms in the benthos of the region where they usually occur in great variety and numbers. A general map of the area under consideration in this study is presented in figure 1.

METHODS

Most of the data for this study have come from the large collection of Antarctic literature housed in the library of the University of Canterbury. The gammaridean amphipod literature for the Southern Ocean is still widely scattered in a large number of expedition reports and scientific journals. Most of the papers from Bate (1862) to Bellan-Santini (1972) and Thurston (1974) which include Antarctic amphipod records have been included. I first went through these reports and worked out all synonomies using Barnard (1958) as the final authority for all names.* Using these names, locality and depth data were extracted for each species.

In dealing with the polychaetes the thorough monographs of Hartman (1964, 1966) were heavily relied on for many of the early records. The papers of Augener (1924) and Benham (1909, 1950) were used for records from the New Zealand Subantarctic, an area not covered by Hartman. Recent literature used in the polychaete analysis includes Rullier (1966), Hartman (1967), Day (1971), and Averintsev (1972). Nomenclature is based on Hartman (1959, 1964, 1965, 1966). Subspecific and infrasubspecific names have been ignored in both amphipods and polychaetes because of their inconsistent past use.

Localities were plotted separately for each group on a Mercator projection of the Antarctic below 50°S, using a latitudinal-longitu-

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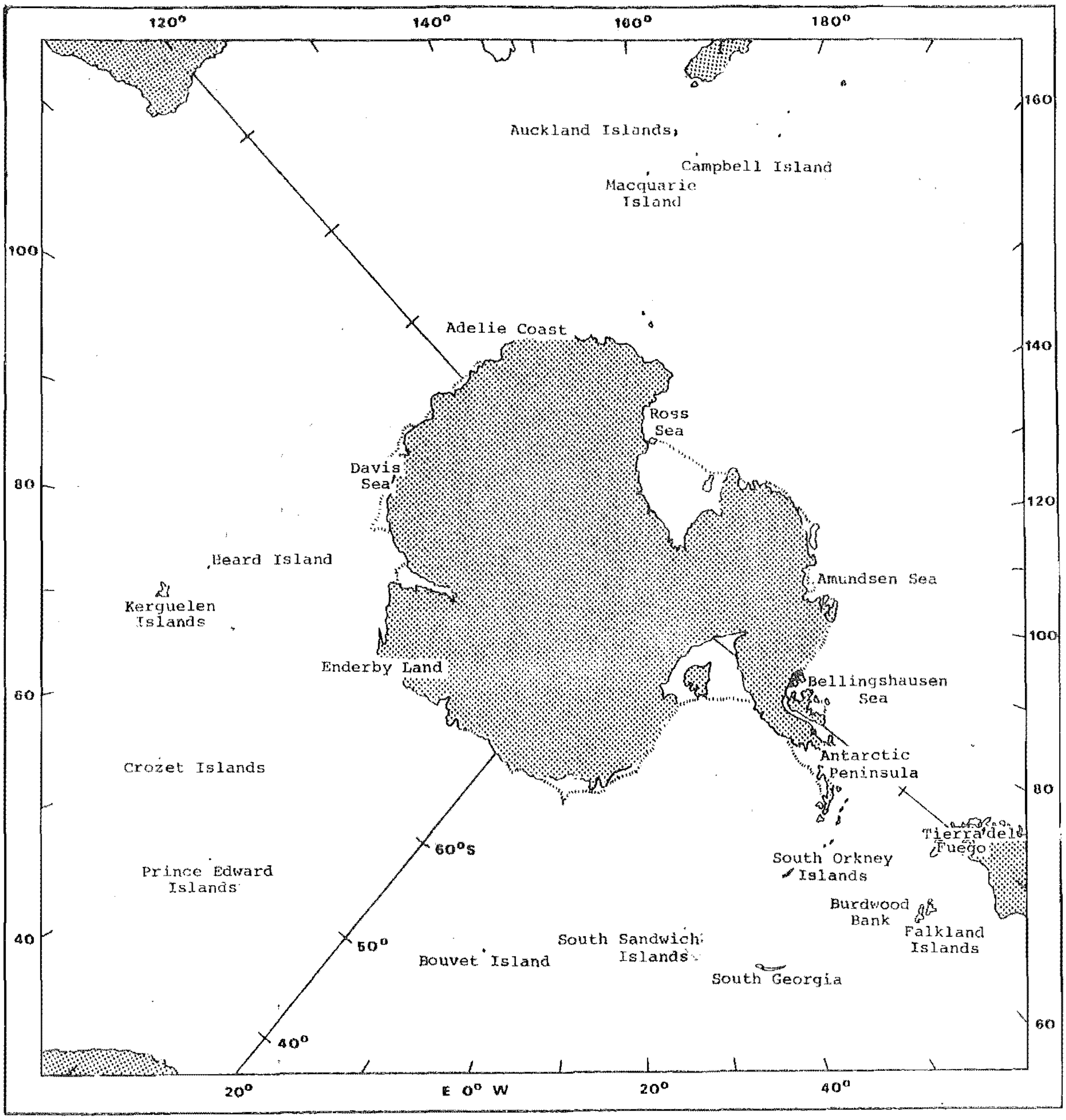
* Much of this nomenclature is out of date, however it has been entirely revised in Part 5 of this thesis, *Catalogue of the Marine Gammaridean Amphipoda of the Southern Ocean*.

Figure 1. The Southern Ocean with geographic names referred to in the text.


120°
140°
160°
180°
160
140
120
100
80
60
100
80
60
40
20°
E 0° W
20°
40°
Auckland Islands
Campbell Island
Macquarie Island
Adelie Coast
Ross Sea
Davis Sea
Heard Island
Kerguelen Islands
Amundsen Sea
Enderby Land
Bellingshausen Sea
Antarctic Peninsula
Crozet Islands
Tierra del Fuego
60°S
South Orkney Islands
Prince Edward Islands
Burdwood Bank
Falkland Islands
50°
Bouvet Island
South Sandwich Islands
South Georgia
40°

dinal grid system. From 2151 amphipod records 23 primary localities were established. Twenty-nine primary localities were established for the polychaetes from 4476 records. These localities were finally dictated by sampling intensity and though many areas are well sampled some have been so inadequately sampled that they had to be excluded.

The data were then sorted to produce checklists with depth ranges for each locality. From these checklists I selected all species occurring in depths less than 500 m and calculated affinities between all localities using the *coefficient of community* index (Peters, 1968). The formula is:

$$\frac{C}{N_1 + N_2 - C} \times 100$$

where C is the number of species common to two areas, N_1 is the number of species in the smaller sample and N_2 is the number of species in the larger sample. These values were then plotted in separate matrices and examined. The matrices were reduced either by combining similar localities, using Peters (1971) recalculation method, or by deleting localities with less than 20 species. The Subantarctic localities may have fewer than 20 species but were retained in order to show their special nature.

RESULTS

AMPHIPODA: ZOOGEOGRAPHIC ANALYSIS

Barnard (1969) refers to the gammaridean amphipods of the Antarctic as a megafaunule. In this megafaunule there have been over 450 species described. They are divided among 195 genera and 41 families. More than 90% of these species are endemic to the Southern Ocean as are nearly 40% of the genera (Table 1). The most

Table 1. Families, genera and species of Antarctic benthic gammaridean amphipods from less than 500 m.

	Families	Genera	% Endemic	Species	% Endemic
Subantarctic Area	30	74	12%	99	53%
Magellanic Area	29	77	13%	121	53%
Scotia Area	33	113	14%	216	46%
East Antarctic Area	29	85	15%	162	43%
Antarctic Region	41	195	39%	445	92%

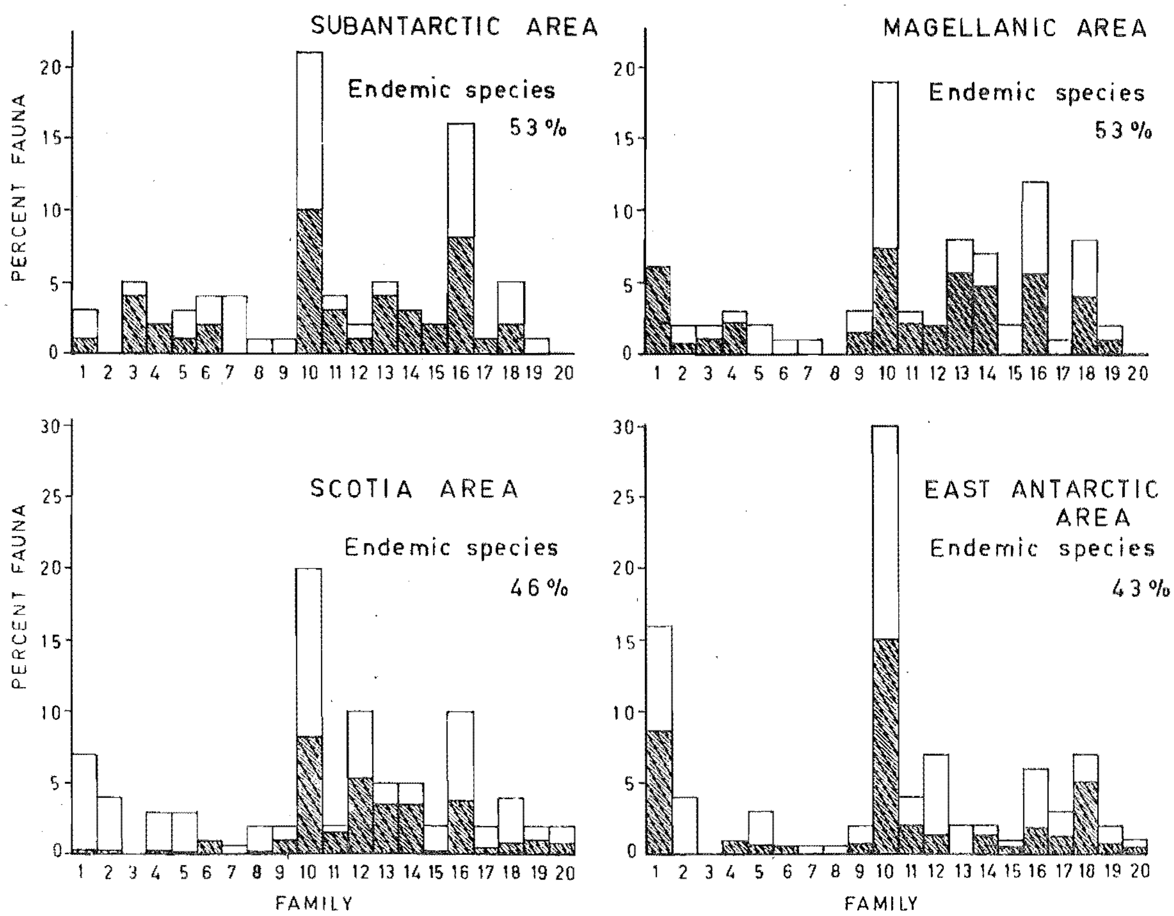
characteristic family is the Lysianassidae with 93 species and 41 genera. They are evenly distributed throughout the Antarctic generally making up 20 to 30% of the species in an area (figure 2). Another important family is the Pontogeneiidae. More common in the Subantarctic, they decrease in importance as latitude increases. The Acanthonotozomatidae show just the opposite trend. They are most diverse on the cold eastern coast of the Antarctic continent and become relatively unimportant in the Subantarctic Islands. The Paramphithoidae are most diverse along the Antarctic Peninsula and the islands of the Scotia Arc, and again become relatively unimportant in the Subantarctic, while the Stenothoidae are consistently found throughout the Antarctic represented mainly by the very diverse genus *Proboloides*. Together these five families make up 53% of the Antarctic megafaunule.

The affinity matrix (figure 3) based on the *coefficient of community* index (Peters, 1968) indicates four distinct areas in the Southern Ocean: A. The Subantarctic area which includes the Auckland and Campbell Islands, Macquarie Island, Kerguelen and Heard Islands, and the Prince Edward Islands; B. The East Antarctic area which includes the Ross Sea, the Adelie Coast and the Davis Sea; C. The Scotia area which includes South Georgia and the islands of the Scotia Arc plus the South Shetlands and the islands along the western coast of the Antarctic Peninsula; D. The Magellanic area composed of the southern tip of South America, the Falkland Islands and the Burdwood Bank. Two major areas are not included in this analysis because of inadequate sampling, the Amundsen and Bellingshausen Seas, and the coastline from Enderby Land through the Weddell Sea. Other areas which need more sampling include the South Sandwich Islands, Bouvet Island, Prince Edward Islands, Heard Island, Macquarie Island, and the islands of the New Zealand Subantarctic.

Subantarctic Area

The Subantarctic area is composed of four groups of isolated islands separated by a large expanse of ocean. All lie roughly along the Antarctic Convergence and all are affected by the West Wind Drift. Although 21 families and 99 species are represented in the faunule, the Lysianassidae with 21 species, and the Pontogeneiidae with 16 species, are dominant (figure 2). The warm water Hyalidae and the cold water Acanthonotozomatidae are both present in moderate

Figure 2. These histograms show the distribution of the top 20 gammaridean amphipod families within the areas described in the text. The total bar indicates the percent contribution of each family to the fauna of each area. The shaded portion of the bar shows the proportion of endemic species within each family. The families are: (1) Acanthonotozomatidae; (2) Ampeliscidae; (3) Aoridae; (4) Calliopiidae; (5) Eusiridae; (6) Gammaridae; (7) Hyalidae; (8) Ischyroceridae; (9) Liljeborgiidae; (10) Lysianassidae; (11) Oedicerotidae; (12) Paramphithoidae; (13) Photidae; (14) Phoxocephalidae; (15) Podoceridae; (16) Pontogeneiidae; (17) Stegocephalidae; (18) Stenothoidae; (19) Thaumatelsonidae; (20) Tironidae.


SUBANTARCTIC AREA
Endemic species
53 %
MAGELLANIC AREA
Endemic species
53 %
SCOTIA AREA
Endemic species
46 %
EAST ANTARCTIC AREA
Endemic species
43 %
PERCENT FAUNA
FAMILY
0
5
10
15
20
25
30
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

numbers. The infaunal Ampeliscidae are apparently missing. Families found here and in the Magellanic area, but missing in the Antarctic, include the Aoridae, Ampithoidae, Atylidae, and Phliantidae.

The islands form at best, a loose knit group with low within area affinities and lower between area affinities (figures 3, 4). Nonetheless within area affinities are higher than between area affinities except in the case of Kerguelen and Heard Islands which show relatively high affinities with the Magellanic area and South Georgia. None of the islands show significant affinities with the islands of the Antarctic Peninsula or with the East Antarctic area. As a faunule they share 99 species, 25% of which are circumsub-antarctic or circumpolar and contribute significantly to the within area affinities; 53% are endemic but usually appear to be confined to one island, and 22% have been collected from one locality within the area but are also known from outside.

The Prince Edward Islands lie east of the tip of South America and just north of the Antarctic Convergence. Of the 13 species known from the islands two are endemic. Considering the non-endemic species 73% are shared with the Magellanic area, and 27% with New Zealand (figure 5). Kerguelen and Heard Islands sit on the Kerguelen Plateau east of the Prince Edward Islands. Of the 58 species known from this area 52% are endemic. Again considering the non-endemic fauna, these islands share 68% of their species with the Magellanic area. Still further to the east Macquarie Island sits on the Macquarie Ridge which, according to Brodie (1965), forms a connection with the Campbell Plateau. Half of the 18 amphipod species reported from this island are endemic. Among the non-endemic species 45% are common with the Magellanic area and 45% are common with New Zealand. Only 30% of the amphipods reported from the Auckland and Campbell Islands are endemic. Although 41% of the non-endemic species are shared with the Magellanic area, 77% are shared with New Zealand. It appears that much of the colonization of these Subantarctic islands has come from the Magellanic area, although South Georgia should also be considered a source. Marion Island shares 54% of its non-endemic fauna with South Georgia and Kerguelen shares 45%. The species which have colonized the islands are mainly alga-living forms which are apparently well suited to dispersal on algal rafts across large expanses of open ocean. Included in the pool of circumsubantarctic species which meet these requirements are *Hyale hirtipalma, Gitanopsis squamosa, Acontiostoma*

Figure 3. Affinity matrix for the gammaridean Amphipoda of the Southern Ocean based on the *coefficient of community* index. Values along the diagonal are the number of species per locality, values on the lower left side are the *coefficient of community* values expressed as percentage, the upper right side is a visual representation of the grouped localities.

	N.Z. Subantarctic Is.	Macquarie I.	Kerguelen & Heard Is.	Marion I.	Tierra del Fuego	Burdwood Bank	Falkland Is.	South Georgia	South Orkney Is.	South Shetland Is.	Antarctic Peninsula	Ross Sea	Adelie Coast	Davis Sea
N.Z. Subantarctic Is.	31													
Macquarie I.	9	18												
Kerguelen & Heard Is.	11	5	59											
Marion I.	10	11	11	13										
Tierra del Fuego	6	5	13	8	84									
Burdwood Bank	2	2	9	0	18	30								
Falkland Is.	7	4	10	6	40	16	80							
South Georgia	3	3	10	5	15	9	11	145						
South Orkney Is.	3	5	9	6	9	8	8	27	69					
South Shetland Is.	2	2	4	3	4	3	5	29	25	94				
Antarctic Peninsula	4	2	5	6	7	2	5	27	34	33	78			
Ross Sea	3	2	9	1	8	8	6	19	14	20	17	82		
Adelie Coast	1	2	7	1	9	6	9	22	14	17	18	30	84	
Davis Sea	0	1	8	0	6	9	7	15	11	17	13	28	26	81

< 10%   10-24%   > 25%

marionis, *Paramoera fissicauda*, *Probolisca ovata*, and *Eusiroides monoculoides*. All of these species are alga-living amphipods which appear to be capable of living on algal rafts, reproducing over a long period of time at sea, and becoming established in the local algae when reaching a destination. Once established at a locality small segments would be washed away on drifting algae to ultimately colonize the next westerly locality. Marion Island and the Kerguelen Islands have little in common with New Zealand, the only other area which might logically supply species to the Subantarctic. In fact it appears that New Zealand may have received a small portion of its fauna from South America in the manner just described above.

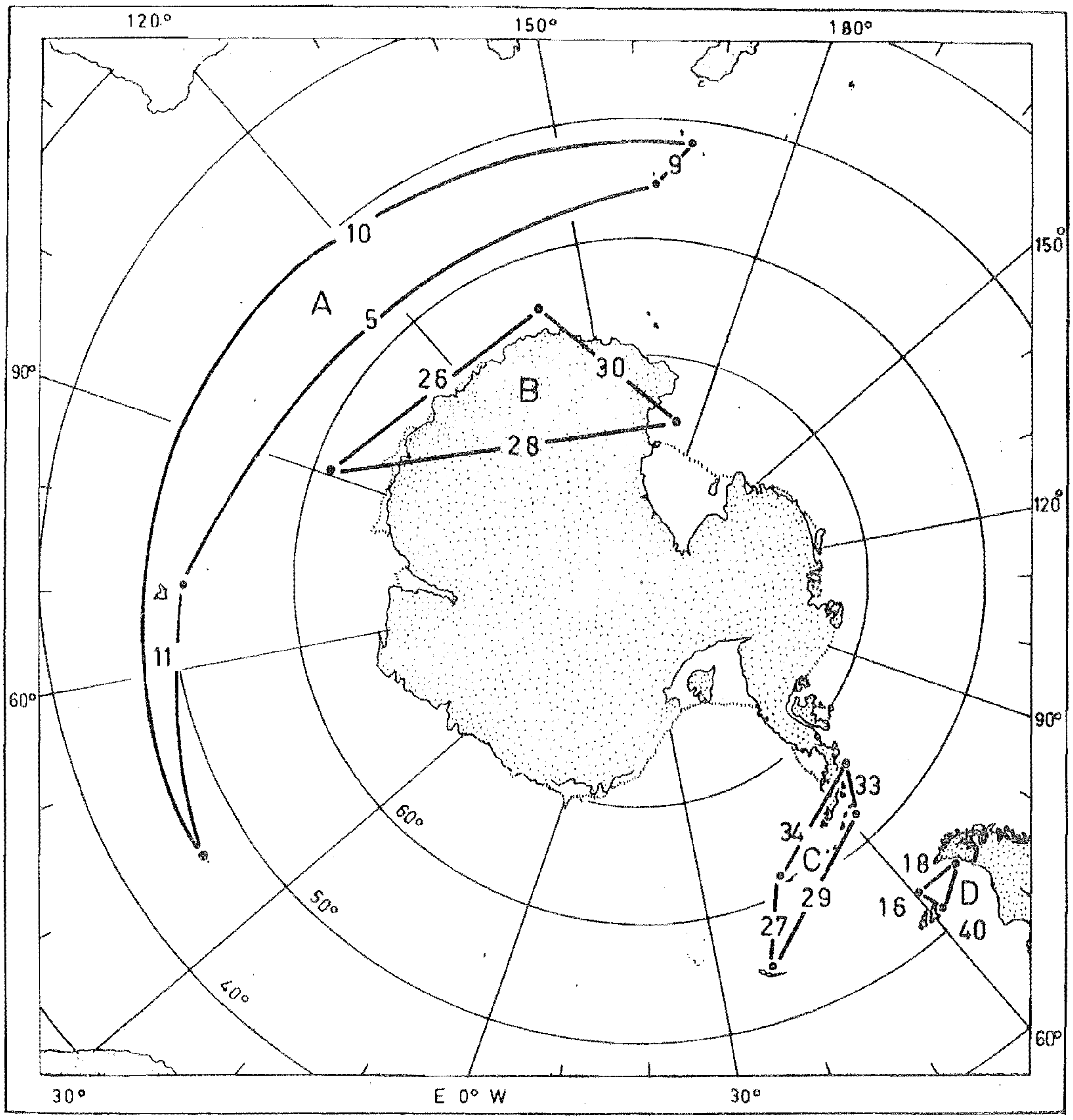
Magellanic Area

The Magellanic area consists of 121 species in 29 families. Fifty-three percent of the species are endemic. The Lysianassidae and the Pontogeneiidae make up 30% of the fauna but other families such as the Photidae, Phoxocephalidae and Stenothoidae are also important. The Acanthonotozomatidae form a very distinctive part of the faunule as all seven of its species are endemic to the area.

This area forms a very distinct grouping of localities. Tierra del Fuego and the Falkland Islands have the highest affinity value (40%) in the matrix (figure 3). This seems logical in view of the fact that the Falklands sit on the edge of the large Patagonian continental shelf and that the currents sweeping around the tip of Cape Horn bath the shores of the Falklands. However the low within area affinities of the Burdwood Bank appear slightly out of place considering its geographic position. This is probably an artifact caused by inadequate sampling.

The influence of the Magellanic area on the Subantarctic fauna is discussed above. Further to the south the Magellanic area exhibits a stronger affinity with the islands of the Scotia Arc than with the Antarctic Peninsula. This is due to a certain amount of circumsubantarctic spillover. Species such as *Hyale hirtipalma*, *Gitanopsis squamosa*, *Paramoera fissicauda*, *Pontogeneiella brevicornis*, and *Probolisca ovata* have penetrated into the Scotia Arc in varying degrees. *H. hirtipalma* extends no farther than South Georgia whereas *G. squamosa* and *P. ovata* are found as far south as the Antarctic Peninsula. A number of circumsubantarctic species appear

Figure 4. Selected *coefficient of community* values, based on gammaridean amphipod species distribution in the Southern Ocean, plotted to show the major areas discussed in the text. A: The Subantarctic Area; B: The East Antarctic Area; C: The Scotia Area; D: The Magellanic Area.



120°
150°
180°
150°
120°
90°
60°
90°
60°
30°
E 0° W
30°
60°
50°
40°
A
B
C
D
10
9
5
26
30
28
11
33
34
29
27
18
16
40

to terminate their ranges in this area.

The connection with the East Antarctic area is very weak and consists mainly of cosmopolitan species such as *Leucothoe spinicarpa* and circumpolar species such as *Eusirus antarcticus*, *Aristias antarcticus*, *Oediceroides calmani*, and *Atyloella magellanica*.

Scotia Area

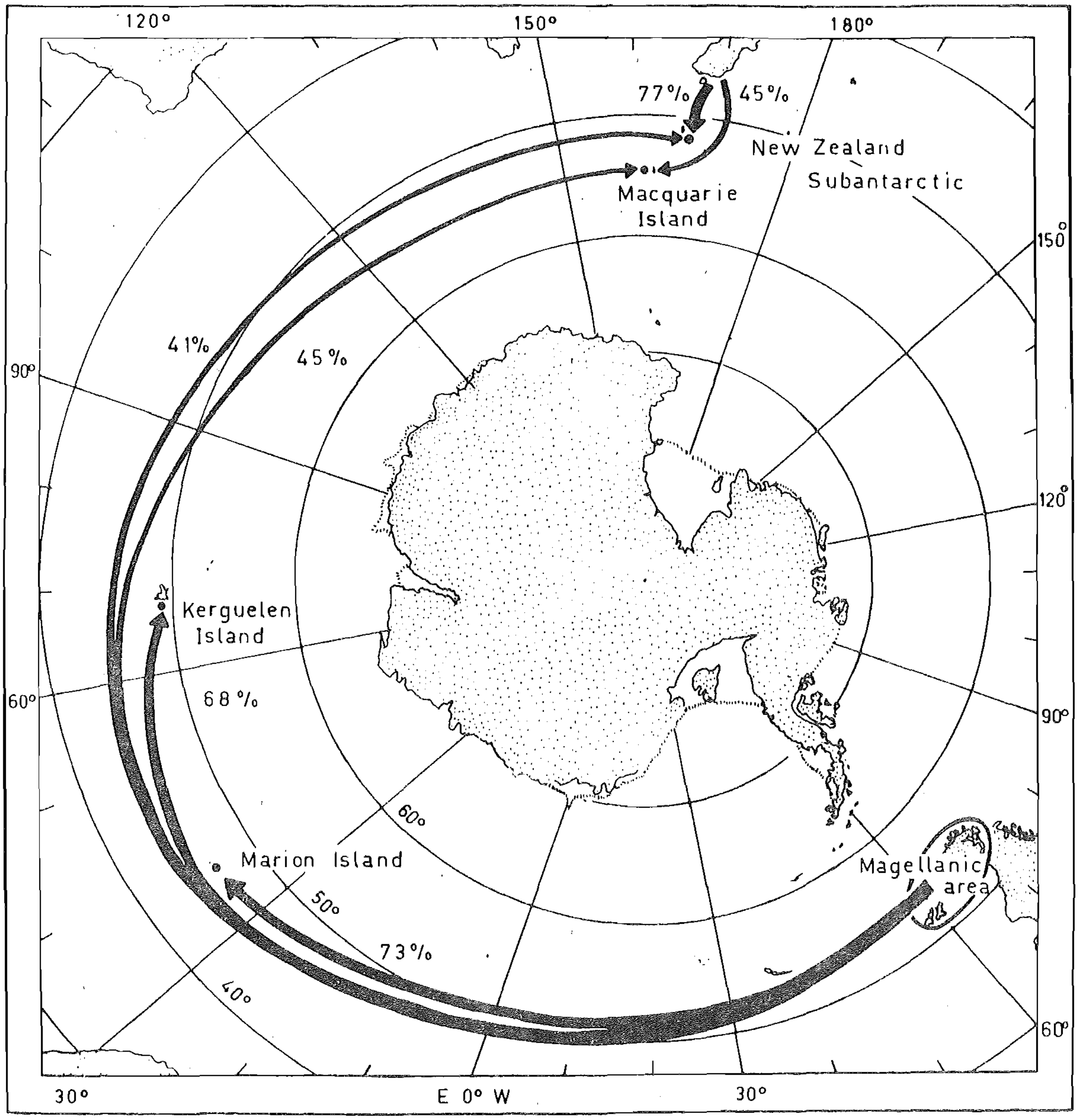
This area includes all the islands of the Scotia Arc plus Bouvet Island, and the western side of the Antarctic Peninsula to Marguerite Bay. The fauna consists of 206 species, of which 46% are endemic. The Lysianassidae become an even more conspicuous part of the fauna as the genera *Orchomenella* and *Tryphosa* diversify (figure 2). Two cold water families, the Acanthonotozomatidae and Paramphithoidae, begin to over-shadow the Pontogeneiidae in importance. The Ampeliscidae are represented by three genera and nine species. The Oedicerotidae and Photidae have 20 species between them, 70% of which are endemic. In the Subantarctic these groups were rather inconspicuous.

Links with northern areas come from circumsubantarctic species such as *Gitanopsis squamosa*, *Probolisca ovata*, and *Paramoera fissicauda* which have penetrated from the Magellanic area into the Scotia Arc. More widespread species like *Polycheria antarctica*, *Leucothoe spinicarpa*, *Orchomenella macronyx*, *Colomastix fissilingua*, and *Oediceroides calmani* also strengthen the link.

In this area South Georgia forms an integral part, however it also exhibits a strong influence on all the other areas in this study. The affinity between South Georgia and the Kerguelen Islands (10%) is as high as many of the affinities between the Kerguelens and other islands in the Subantarctic area. In the East Antarctic, South Georgia still exhibits considerable influence even in the Davis Sea (figure 3).

The high number of species recorded from South Georgia (145) indicates more than just the intensive sampling programs carried out there. The island is large with several sheltered bays and harbours. It is situated on an extensive underwater shelf in an area of vigorous upwelling and very productive seas. Although pack ice surrounds the island in winter, seawater temperatures in summer range between 1.7° and 3.1°C (Dewitt, 1971). In effect the environment is neither as cold as the Antarctic nor as mild as the Subantarctic, and

Figure 5. The percent of non-endemic species shared between certain Subantarctic Islands and the Magellanic Area. The affinity decreases as the distance from the Magellanic Area increases.



120°
150°
180°
77%
45%
New Zealand
Subantarctic
Macquarie
Island
150°
41%
45%
90°
120°
Kerguelen
Island
60°
68%
90°
60°
Marion Island
50°
73%
Magellanic
area
40°
60°
30°
E 0° W
30°

this along with geographic position and the effect of the West Wind Drift may account for the large number of species found there. South Georgia is here considered an ecotone between the Subantarctic and Magellanic areas to the north and the high Antarctic areas in the south, with more species than either adjacent area. If the fauna is divided geographically 26% of the species have ranges that extend both north and south of South Georgia, 13% have ranges extending only to the north, 38% have southern ranges and 22% are endemic. What is striking is the number of species of such high latitudinal families as the Acanthonotozomatidae and the Paramphithoidae, whose northern ranges terminate at South Georgia.

East Antarctic Area

The East Antarctic area is separated from the Scotia area on the western side by a virtually unsampled ocean which includes the Bellingshausen Sea and the Amundsen Sea. It is separated on the eastern side by a similar tract of unsampled ocean which includes the coastline from Enderby Land right through the Weddell Sea. The area of concern here extends from McMurdo Sound in the Ross Sea around the Adelie Coast to the Davis Sea. It has been well sampled by Australian, British, French, and German expeditions.

The localities shown in figures 3 and 4 indicate a close knit group which exhibits moderate affinities with the Scotia area, but very little affinity with the Magellanic area and even less with the Subantarctic. The faunule is composed of 162 species in 29 families. Forty-three percent of the fauna is endemic to the area. Five families, the Lysianassidae, Acanthonotozomatidae, Paramphithoidae, Stenothoidae, and Pontogeneiidae make up 63% of the faunule.

Barnard (1969) designates the Acanthonotozomatidae as an Antarctic family and the Paramphithoidae as a cold water family. In the Antarctic Region both are important members of the fauna (figure 2). In the East Antarctic area the Acanthonotozomatidae have 26 species of which 54% are endemic. The Paramphithoidae have only 11 species with 18% endemism. In the Scotia area this situation is reversed. The Acanthonotozomatidae have 15 species with only 13% endemism but the Paramphithoidae have 22 species with 54% endemism. This indicates a centre of speciation and radiation for the Acanthonotozomatidae in the East Antarctic area, and a similar situation for the Paramphithoidae in the Scotia area. Furthermore the non-endemic members of the East Antarctic acanthonotozomatid flock make up 87% of the Scotian species. The situation in the paramphithoids is almost exactly the reverse. Finally the East Antarctic acanthonotozomatid flock contains five endemic genera, one of which has four species. It becomes increasingly difficult to understand how this speciation was accomplished. Perhaps during periods of more intense glaciation, ice shelves moving into the surrounding ocean formed seas similar to the present Davis Sea which is bounded by the Shackleton Ice Shelf and the West Ice Shelf. In these isolated pockets of cold water gene flow would be confined, allowing speciation to occur. As the ice shelves receded to a position similar to today mixing would again occur but by then reproduction would no longer be possible. The intense glaciation of the Pliocene and Pleistocene postulated by Craddock (1970), and Denton, Armstrong, and Stuiver (1970) would have been in effect three to seven million years ago. It is during this period that the evolution of the East Antarctic acanthonotozomid flock and the Scotian paramphithoid flock could have occurred.

POLYCHAETA: ZOOGEOGRAPHIC ANALYSIS

Hartman (1964, 1966) in her historical summary of the Antarctic polychaete megafaunule recorded a total of 457 species (including subspecies) from the Southern Ocean. More recently she (1967) reported on the polychaetes collected by United States expeditions in Antarctic water between 1962 and 1966, and records 367 species of which 190 were new records. However 120 of these records referred to undescribed species so that a realistic figure for the number of nominate species up to 1967 is 527. Since then Averintsev (1972) has described a further 27 species and Knox and Cameron (in press) add three more, giving a total of 557 species. It is estimated that when the fauna is fully described it will total over 800 species.

The most diverse family is the Syllidae with 51 species in 20 genera. In the Subantarctic islands they tend to dominate the fauna but in the Magellanic area and around the Antarctic coasts they share their dominance with the Polynoidae. The Polynoidae are perhaps the most characteristic Antarctic family. In this analysis 49 species in 21 genera are represented. The Terebellidae, with 39 species in 18 genera, are another important family which consistently make up about 10% of the polychaeta fauna wherever they occur. The Phyllodocidae with 27 species in 10 genera consistently make up about 7% of the fauna.

The matrix (figure 6) based on the *coefficient of community* index (Peters, 1968) indicates: A. The Subantarctic area which includes the Prince Edward Islands, Macquarie Island, and possibly the New Zealand Subantarctic Islands; B. The Antarctic area which includes the entire Antarctic coastline plus the islands of the Scotia Arc and Kerguelen and Heard Islands; C. The Magellanic area which includes Tierra del Fuego and the Falkland Islands.

Subantarctic Area

The Subantarctic area contains 93 species in 68 genera (Table 2). No genera, and only 5% of the species are endemic to the area (figure 7). Marion Island and Macquarie Island show a very good affinity (34%) with each other (figure 8). Of the 13 species they share, four are circumsubantarctic and nine are circumpolar. These circumpolar forms include *Neanthes kerguelensis*, *Potamilla antarctica*, *Paralaeospira aggregata*, and *Thelepus setosus* and add a definite Antarctic element to the islands.

Table 2. Families, genera, and species of Antarctic benthic polychaetes known from less than 500 m.

	Families	Genera	% Endemic	Species	% Endemic
Subantarctic Area	31	68	0%	93	5%
Magellanic Area	36	152	0%	223	16%
Antarctic Area	36	177	7%	324	38%
Antarctic Region	44	227	5%	440	57%

The Auckland and Campbell Islands have only an 11% affinity with Macquarie Island and a 7% affinity with Marion Island. However about 70% of the non-endemic species reported from the Auckland and Campbell Islands also occur in New Zealand. Consequently, the polychaetes of these islands should be considered part of the New Zealand fauna.

Figure 6. Affinity matrix for the Polychaeta of the Southern Ocean based on the *coefficient of community* index. Values along the diagonal are the number of species per locality, values on the lower left side are the *coefficient of community* values expressed as percentage, the upper right side is a visual representation of the grouped localities.

	N.Z. Subantarctic Is.	Macquarie I.	Kerguelen & Heard Is.	Marion I.	Tierra del Fuego	Falklands Is.	South Georgia	South Orkney Is.	South Shetland Is.	Antarctic Peninsula	McMurdo Sound	Cape Adare	Adelie Coast	Davis Sea	Enderby Land
N.Z. Subantarctic Is.	67														
Macquarie I.	11	22													
Kerguelen & Heard Is.	15	15	105												
Marion I.	7	34	22	29											
Tierra del Fuego	11	11	28	13	163										
Falklands Is.	11	11	27	12	41	127									
South Georgia	7	11	34	14	30	35	129								
South Orkney Is.	5	8	22	11	15	18	24	70							
South Shetland Is.	6	8	26	9	22	23	36	38	121						
Antarctic Peninsula	7	9	28	11	22	23	38	25	42	127					
McMurdo Sound	6	8	18	10	17	19	29	24	32	30	87				
Cape Adare	5	11	21	11	17	23	30	19	25	31	39	69			
Adelie Coast	6	8	21	10	17	18	25	18	23	26	28	32	59		
Davis Sea	8	7	21	10	19	19	28	21	25	27	39	34	28	108	
Enderby Land	6	6	21	8	20	22	36	27	33	35	30	34	25	38	99

< 10%   10-24%   > 25%

Magellanic Area

The affinity between Tierra del Fuego and the Falkland Islands is one of the highest in the matrix (figure 6), causing it to be considered a separate area. However as figure 8 shows there is also a high affinity (35%) between the Falkland Islands and South Georgia. The high affinity is caused by such widespread species as *Laetmonice producta, Capitella capitata, Cirratulus cirratus, Harmothoe spinosa, Exogone heterosetosa*, and *Artacama proboscidea*. The Magellanic area also shows relatively high affinities (27-28%) with Kerguelen and Heard Islands, caused by similar widespread species.

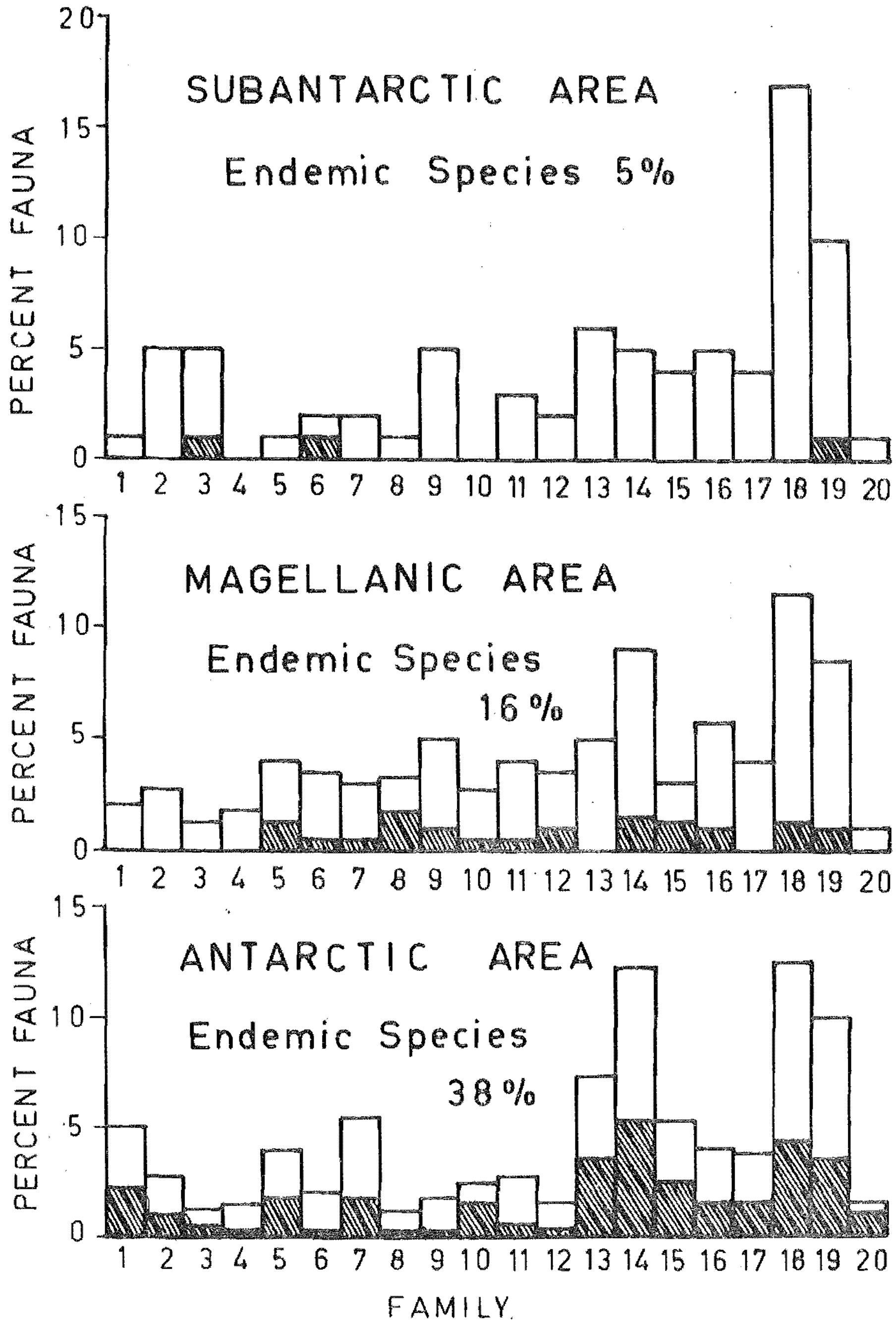
Antarctic Area

The high affinities around the entire coastline and through the Scotia Arc (figure 8) reflect the homogeneity of the Antarctic polychaete fauna. The Scotia Arc and the Antarctic Peninsula group together well. Enderby Land shows good affinity (36%) with the Scotia Arc to the west and the Davis Sea (38%) to the east. McMurdo Sound has an affinity of 39% with the Davis Sea and with Cape Adare, however with the Antarctic Peninsula 6000 km to the east the affinity falls to 32%. Adelie Land shows slightly lower affinities than might be expected but they may be a result of small sample size. Finally Kerguelen and Heard Islands have high affinities with South Georgia (34%) and the Antarctic Peninsula (28%).

The polychaete fauna of the Antarctic is apparently homogeneous around the entire coastline. The high affinities of the Kerguelen Islands with the Antarctic area indicate that it is also a part of this faunule. Furthermore there is a strong connection between the Magellanic area and South Georgia. Finally, although Marion and Macquarie Islands do not show high affinities with the Antarctic, their non-endemic fauna suggests that it was derived, at least in part, from further south. The only islands that do not align with the Antarctic are the Auckland and Campbell Islands and they appear to be most closely related to New Zealand.

The results of the polychaete study indicate an old homogeneous fauna with a slow evolutionary rate. Many of the species are widespread, vertically (eurybathic) and laterally (circumpolar). This type of distribution supports the theory of a fauna able to advance

Figure 7. These histograms show the top 20 polychaete families divided into areas as described in the text. The total bar indicates the percent contribution of each family to the fauna of each area. The shaded portion of the bar shows the proportion of endemic species within each family. The families are: (1) Ampharetidae; (2) Cirratulidae; (3) Eunicidae; (4) Euphrosinidae; (5) Flabelligeridae; (6) Lumbrineridae; (7) Maldanidae; (8) Nephtyidae; (9) Nereidae; (10) Onuphidae; (11) Opheliidae; (12) Orbiniidae; (13) Phyllodocidae; (14) Polynoidae; (15) Sabellidae; (16) Serpulidae; (17) Spionidae; (18) Syllidae; (19) Terebellidae; (20) Trichobranchidae.


SUBANTARCTIC AREA
Endemic Species 5%
MAGELLANIC AREA
Endemic Species
16 %
ANTARCTIC AREA
Endemic Species
38 %
PERCENT FAUNA
FAMILY
0
5
10
15
20
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

and recede from deep to shallow water as glaciation advanced and receded. At the same time its age, cosmopolitan nature, and slow rate of evolution would allow it to advance laterally around the continent forming the type of fauna which occurs there today. This fauna is characterized by a moderately high endemicity at the species level (ca 60%), very low endemicity at the generic level (ca 5%) and many widespread eurybathic species.

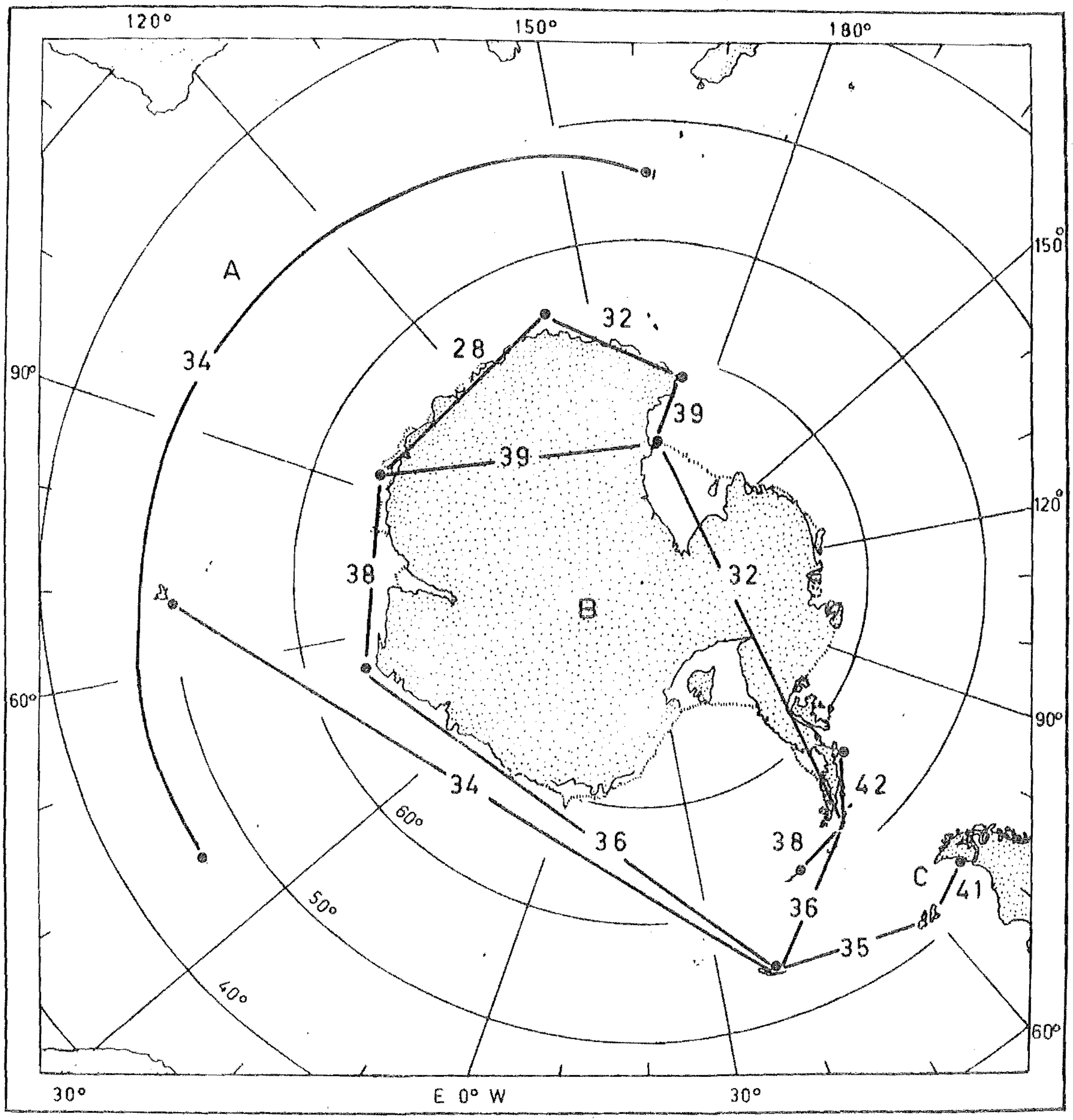
These conclusions contrast sharply with the type of fauna Andriashev (1965) and Kusakin (1967) discussed, and with the present findings for the Amphipoda. In these cases we are dealing with groups not so old or eurybathic and with faster rates of evolution. Averintsev (1972) has discussed the distribution of the Antarctic errant polychaete fauna and his conclusions in contrast to this paper support the type of distribution patterns found in fishes, isopods, and amphipods.

DISCUSSION

PREVIOUS BIOGEOGRAPHIC SCHEMES

The early work on Antarctic zoogeography was done by ichthyologists (Regan, 1914; Nybelin, 1947). Andriashev (1965) reviewed their work and proposed a scheme, based on coast fishes, which integrated their work with his more recent findings. Under this scheme the Antarctic Region included a Glacial Subregion and a Kerguelen Subregion. The Glacial Subregion included a Continental Province and a South Georgian Province. The former was in turn divided into an East Antarctic District which included the coastline from the eastern Ross Sea to the western Weddell Sea, and the West Antarctic District including the Antarctic Peninsula plus the South Shetland Islands and the South Orkney Islands. The South Georgian Province included South Georgia, the South Sandwich Islands and Bouvet Island. Finally the Kerguelen Subregion included Marion Island, the Crozet Islands, Kerguelen and Heard Islands, and Macquarie Island. The major difference between this scheme and those of earlier workers was the inclusion of Subantarctic islands in the Antarctic Region instead of a special Subantarctic Region. Dewitt (1971) concluded that the fishes of the Kerguelen Islands were much more closely related to the Antarctic than the Subantarctic, thus strengthening Andriashev's scheme. Dewitt (1971) stated further that the fauna of

Figure 8. Selected *coefficient of community* values, based on polychaete species distribution in the Southern Ocean, plotted to show the major areas discussed in the text.
A: The Subantarctic Area; B: The Antarctic Area;
C: The Magellanic Area.


120°
150°
180°
150°
120°
90°
60°
90°
60°
30°
E 0° W
30°
A
B
C
34
28
32
39
39
38
32
34
36
42
38
36
35
41
60°
50°
40°

these islands was probably derived from the islands of the Scotia Arc, based on the strong affinities between the areas and the prevailing surface currents.

Ekman (1953) was the first person to advance a comprehensive zoogeographic scheme. Although based on northern hemisphere concepts and before the more recent intensive benthic exploration, it is nevertheless remarkably similar to more recent schemes. Knox (1960) proposed a biogeographic scheme based on the littoral flora and fauna of the Southern Ocean, which included an Antarctic Region and a Subantarctic Region. The Antarctic Region contained an Antarctic Province and a South Georgian Province. In the Antarctic Province a Rossian Subprovince for the Ross Sea and a Scotian Subprovince, which included the Antarctic Peninsula and all the islands of the Scotia Arc except South Georgia, was proposed. Bouvet Island and Heard Island were included in the Antarctic Province. The Subantarctic Region included the Kerguelen Province which was composed of the Prince Edward Islands, the Kerguelen Islands and Macquarie Island. The islands south of New Zealand were included in the Antipodean Province which has closer affinities with New Zealand. Southern South America formed the Magellanic Province. Knox found a close relationship between the Kerguelen Province and the Magellanic Province leading him to the conclusion that the flora and fauna were derived from southern South America via the West Wind Drift.

Kusakin (1967) was probably the first worker to use an objective analytical approach to studying the zoogeography of the Antarctic. He used Preston's resemblance equation to calculate affinities of species and genera between localities. From the analysis Kusakin developed three regions; the Antarctic Region, the Kerguelen Region, and the Patagonian Region. The Antarctic Region is divided into an East Antarctic Province, a West Antarctic Province, and a South Georgian Province, with similar boundaries to Andriashev (1965). In the Kerguelen Region he gave each island group - Prince Edward Islands, Kerguelen and Heard Islands and Macquarie Island - the status of a province. The Magellan Province in the Patagonian Region contains the southern tip of South America and the Falkland Islands. Kusakin concludes that all three of his regions are so similar both in composition and in the origin of their fauna that they may be united into the Australian Super-region.

Hedgpeth (1969, 1971) acknowledged that the fauna of the Antarctic Peninsula and the islands of the Scotia Arc is "somewhat different in composition from the 'high' Antarctic Region and shows strong affinities with that of South America". The animals which show these trends include Bryozoa, Brachiopoda, Mollusca, and Echinodermata. Kott (1969) also felt that the Ascidiacea may exhibit this pattern.

Hedgpeth (1969) proposed a biogeographic scheme which incorporated all the previous schemes. It appears most similar to Knox (1960) except that it excludes the Rossian Subprovince, demotes South Georgia to a district, and raises the Scotian Subprovince to a Province. Heard and the Kerguelen Islands are included as extensions of the Continental Subregion. The Subantarctic Region is left essentially intact with a Kerguelen Subregion and a Magellanic Subregion. The recent paper of Averintsev (1972) proposed a scheme based on errant polychaetes which appears very similar to Kusakin (1967).

Dell (1972) in reviewing previous schemes and considering molluscan distribution essentially agreed with Hedgpeth's divisions except that he did not distinguish a separate Scotia Subregion.

COMPARISON OF THE PRESENT FINDINGS WITH PREVIOUS BIOGEOGRAPHIC SCHEMES

The present findings, based on gammaridean amphipods, follow very closely the biogeographic schemes mentioned above. The East Antarctic area is essentially the same as the East Antarctic District of Andriashev (1965) and the East Antarctic Province of Kusakin (1967). The Scotia area is essentially in agreement with most workers except that these results show South Georgia as a northern border of the area with many of the peculiarities that a border zone may possess. Thurston (1974) found a break in the fauna which grouped South Georgia with the South Orkney Islands and grouped the South Shetland Islands with the Antarctic Peninsula. In this analysis such a discontinuity did not appear. The Magellanic area appears distinct as most other workers have found. In the Subantarctic area Kerguelen and Heard Islands appear to have a fauna similar to the Prince Edward Islands, while Macquarie Island and Auckland and Campbell Islands align more closely with New Zealand. However all of these islands exhibit an independent nature which makes it difficult to group them with much conviction at the present time.

The polychaetes do not follow previous schemes very closely. For the reasons outlined above they group mainly as a large Antarctic area which includes the whole coastline including the Scotia Arc and a smaller Magellanic area which is not very convincingly separated. The Subantarctic area includes only Macquarie and Marion Islands, both of which show some relationship with the Antarctic area. Kerguelen and Heard Islands align with the Antarctic, and Auckland and Campbell Islands align with New Zealand.

ACKNOWLEDGMENTS

I am most grateful to Professor G.A. Knox for the opportunity to undertake this study, and for his constant counsel and encouragement as it progressed. I thank Dr Colin McLay for preparing the computer programs and for his helpful criticisms of the manuscript. I also thank Mrs Lynne Rako, and Miss Suzanne Bullock who helped compile the data, and Mrs D.C. Kennedy who prepared some of the figures.

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Studies on the Macrobenthos
of the Southern Ocean. 3.
Neoxenodice cryophile, a new
Podocerid from the Ross Sea,
Antarctica (Crustacea: Amphipoda).

Neoxenodice cryophile, a New Podocerid from the Ross Sea, Antarctica (Crustacea: Amphipoda)

James K. Lowry

Schellenberg (1926) described *Neoxenodice caprellinoides* Schellenberg from the Crozet Basin at a depth of 3397 m. Barnard (1962) rediscovered the species from the Cape Basin of the South Atlantic Ocean at a depth of 4893 m. During the austral summer seasons of 1970-71 and 1971-72 I collected *Neoxenodice cryophile* n. sp. in 30 to 250 m of water off Cape Bird and Cape Hallett, Antarctica, using a Smith-McIntyre bottom grab. Type material of this species has been deposited in the National Museum of Natural History (Washington, D.C.) and the National Museum of New Zealand (Wellington).

I thank the members of the University of Canterbury's Cape Bird field party and Captain Venzke and the officers and crew of the USCGC *Northwind* who made the collections possible. I thank Dr D.S. Horning for critically reviewing the manuscript, and Professor G.A. Knox, in whose program this study was carried out, for his continuing support and for identifying the polychaete, *Spiophanes tcherniai* Fauvel, 1951.

Podoceridae

Neoxenodice cryophile new species (figs 1-19)

Material examined. - Holotype, adult female, 7.1 mm, USNM 143918; Moubray Bay, Cape Hallett, Antarctica; gravel and sandy-mud bottom, 250 m depth; 18 January 1972; J.K. Lowry.

Paratypes, 1 adult female, 8.0 mm, Z.Cr. 1917; Moubray Bay, Cape Hallett, Antarctica; gravel and sandy-mud bottom, 250 m depth; 18 January 1972; J.K. Lowry. 1 specimen, 5.0 mm, USNM 143919; Cape Bird, Ross Island, Antarctica; gravel and sandy-mud bottom, 250 m depth; 9 January 1972; J.K. Lowry. 1 adult female, 6.0 mm, 1 juvenile female, 4.5 mm, 9 other specimens, USNM 143920; Moubray Bay, Cape Hallett, Antarctica; gravel and sandy-mud bottom, 104 m depth; 17 January 1972; J.K. Lowry.

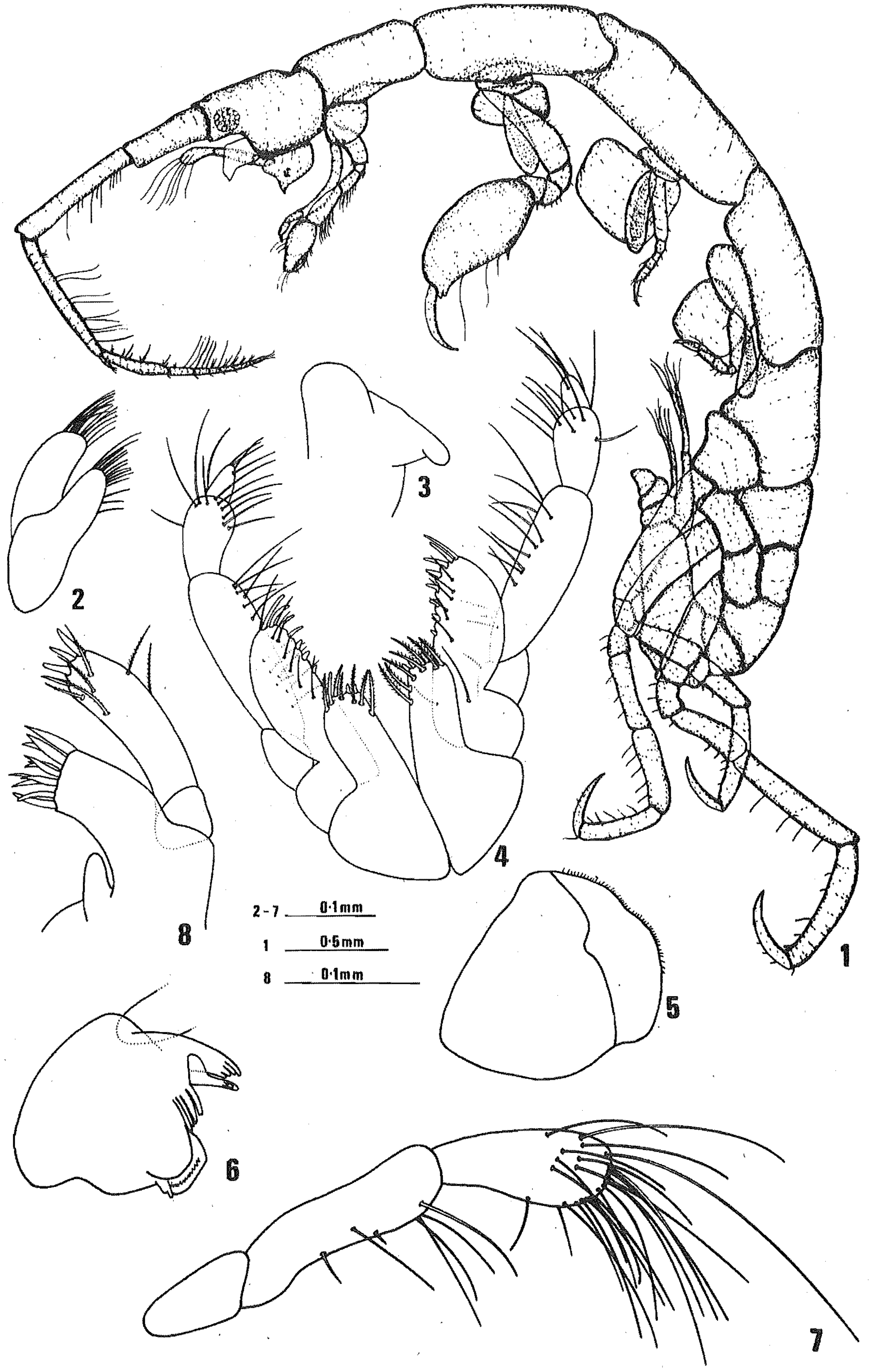
Diagnosis. - Eyes well developed; flagellum of antenna 2 with 3 articles; palm of gnathopod 2, convex, spinose at posterior border and along margin; peduncle of uropod 2 extending just beyond tip of telson; telson with 2 large setae at apex.

Description. - Female (figs 1-19) 7.1 mm. Long, thin, caprellid-like; paraeonites 1-4 drawn out, with lateral nodes at coxal attachments 1 and 2; coxae very small, distance between coxae 1-4 over twice their width; eyes well developed, red and white in life; body translucent with areas of yellow and gold around the mouthparts and laterally near the end of each segment, antennae with specks of greenish-yellow pigment; gnathopods, peraeopods, uropods and telson colourless.

Antenna 1 (fig. 10): slightly longer than antenna 2, less than 1/2 body length; peduncle 1.5 times longer than flagellum, article 1 slightly more than 1/2 the length of article 2, articles 2 and 3 subequal; accessory flagellum with 1 article, 1/3 length of flagellum article 1; flagellum with 7 articles, article 1 longest, ventral surface of peduncular articles 2 and 3 and flagellum fringed with long setae. Antenna 2 (fig. 9): gland cone present; peduncle nearly 3 times length of flagellum, article 3 nearly 1/2 length of article 4, 1/3 length of article 5; flagellum with 3 articles, article 1 longest, ventral surface of antenna 2 fringed with long setae.

Mandible (figs 6, 7): palp, long, with 3 articles, article 1 shortest, article 2 longest, article 3 expanded distally with about 20 long terminal setae. Incisor serrated, lacinia mobilis present, 4 brush-tipped spines posterior to lacinia mobilis, molar non-triturating. Lower lip (fig. 3): outer lobes well developed with mandibular projections. Upper lip (fig. 5): rounded, slightly incised. Maxilla 1 (fig. 8): palp with 2 articles, article 2 longest with 6 plumose setae near distal end and 4 terminal spines; outer plate well developed with 8 terminal spines; inner plate reduced, lobate, setae absent. Maxilla 2 (fig. 2): inner plate slightly shorter than outer plate with 4 lateral setae and about 10 terminal setae; outer plate with about 13 terminal setae. Maxillipeds (fig. 4): well developed, inner plate extending to middle of outer plate, with 3 spines along distal border and 7 plumose setae beginning along lateral border and extending to terminus; outer plate extending just past midpoint of palp article 2, with 7-8 spines along lateral edge; palp with 4 articles, article 2 longest, equal to combined length of other 3 articles, with setae near inner edge, article 3 expanded distally, setae present near distal end, article 4 with spine at apex.

Gnathopod 1 (fig. 14): subchelate, smaller than gnathopod 2; coxal plate reduced, situated anteriorly on peraeonite 1, article 2 longest, article 3 and 4 with setae along ventral border, article 5

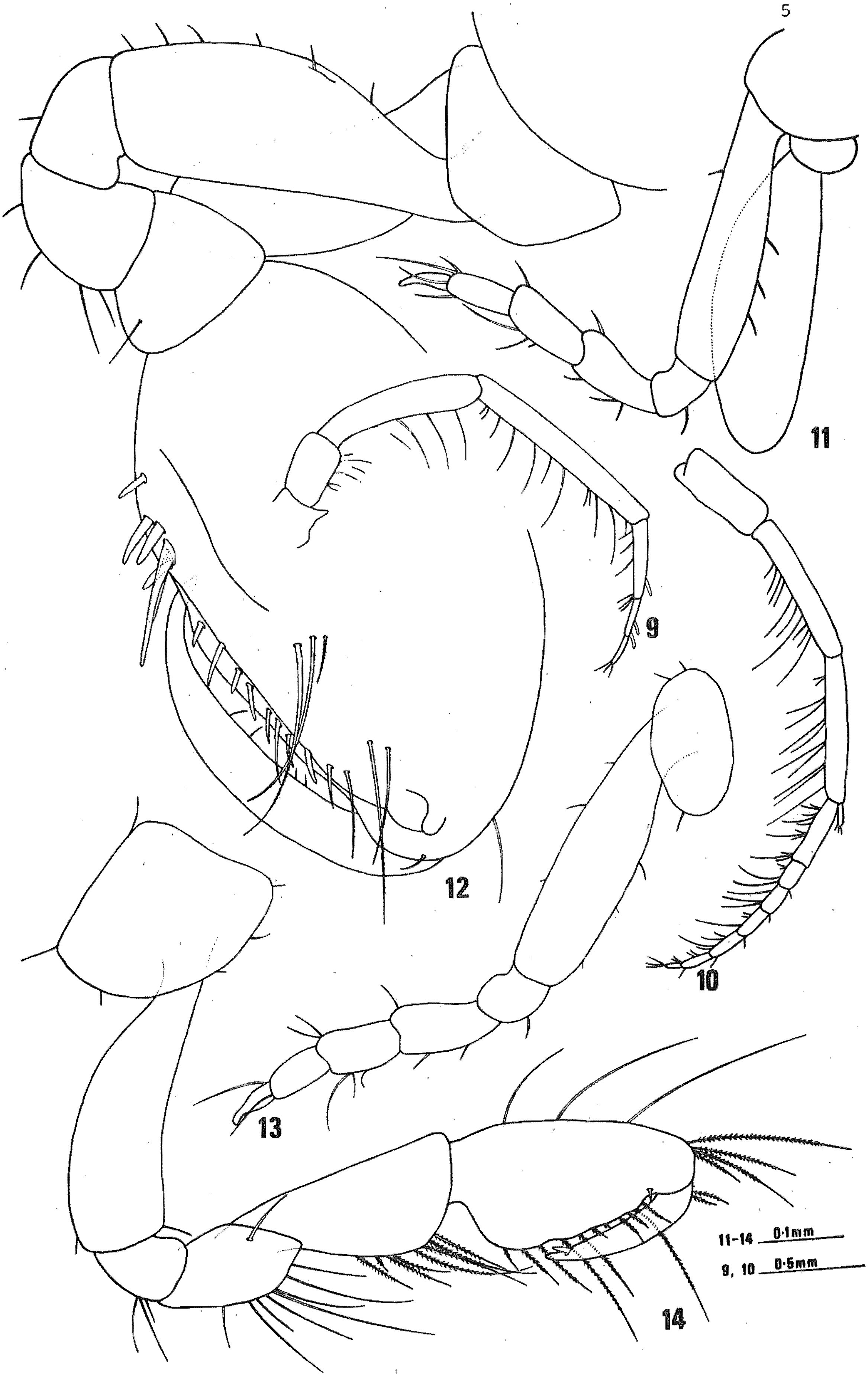


Figures 1-8. *Neoxenodice cryophile* n. sp. Female: 1, adult female; 2, maxilla 2; 3, lower lip; 4, maxillipeds; 5, upper lip; 6, mandible; 7, mandibular palp; 8, maxilla 1.

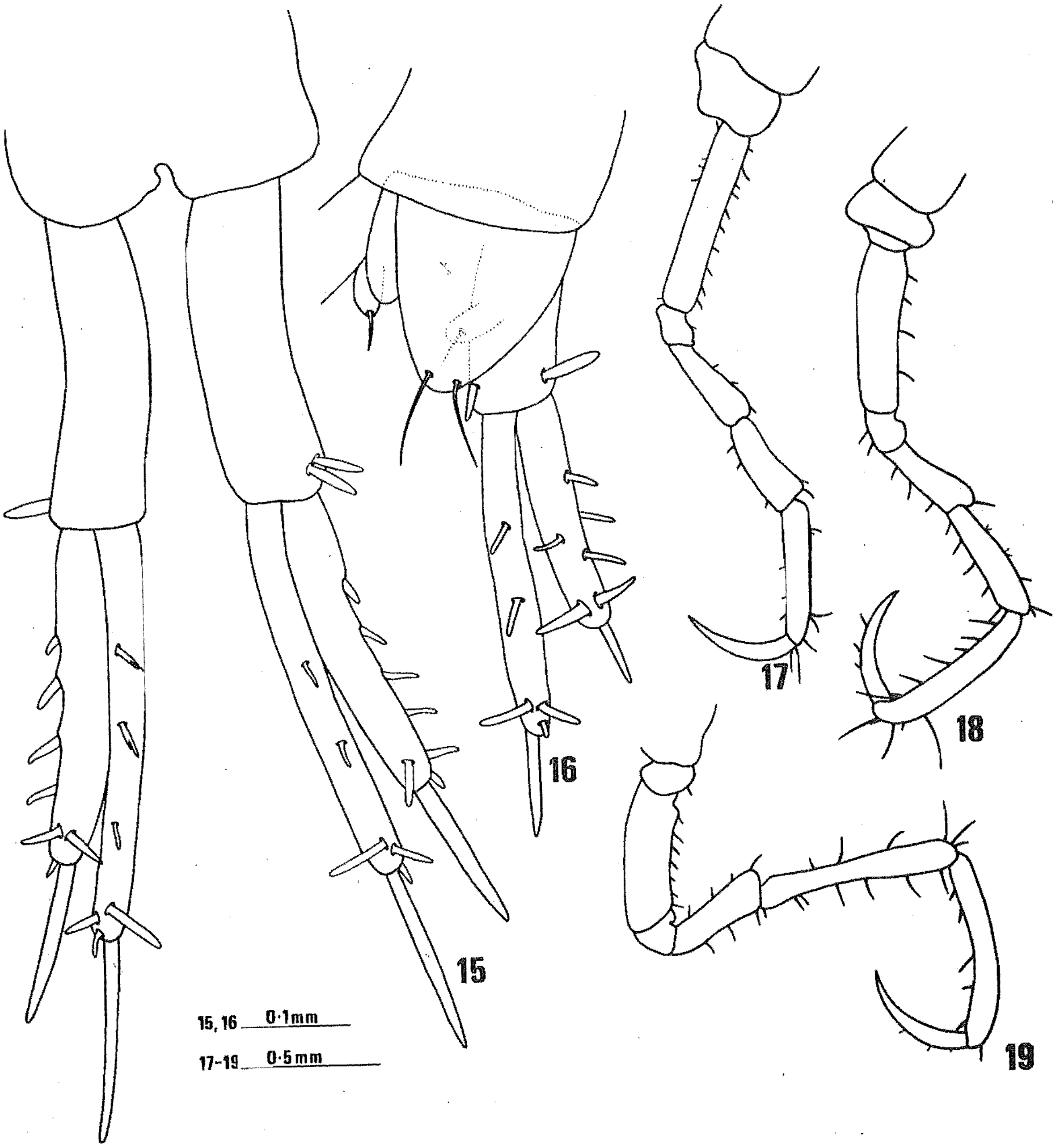
elongate, plumose setae along ventral border, article 6 subtriangular, distally truncate, slightly longer than 5, palm rugose, convex, plumose setae along border, dactylus well developed with 1 short spine near apex, dactylus about 2/3 length of propodus. Gnathopod 2 (fig. 12): subchelate, nearly 1/4 length of body; coxa 2 smaller than coxa 1, attached along medial edge of peraeonite 2, gill tube-like, as long as article 2, article 2 robust with small setae along posterior border, articles 3 and 4 short and subequal, article 5 compressed, article 6 massive, elliptical, 1.8 times longer than wide, 5 small spines and 1 large spine at posterior edge of palm, palm 1/2 length of propodus with 9 spines and 6 plumose setae along inner surface, dactylus well developed, extending length of palm with a few small setae along posterior border.

Peraeopods 1 and 2 (figs 11, 13): very similar, much reduced in size, article 2 long and narrow with 3 short setae along posterior border, articles 3-6 short with sparse setation, dactylus short; peraeopod 1 with tube shaped gill slightly longer than article 2; peraeopod 2 with a reduced elliptical gill. Peraeopod 3 (fig. 17): long and thin, sparsely setose, coxa larger than coxa 6 or 7, article 2 longer than article 6, articles 4 and 5 subequal, both shorter than 6, dactylus well developed, slightly curved, nearly as long as article 6. Peraeopod 4 (fig. 18): long and thin, sparsely setose, coxa small, rounded posteriorly, article 2 thicker than other articles, equal in length to article 6, article 4 shorter than article 5, posterior distal corner produced, article 6 longer than 5 with 1 short spine at articulation of dactylus, dactylus long, curved, nearly as long as article 6. Peraeopod 5 (fig. 19): long and thin, sparsely setose, coxa small and round, article 2 thicker than following articles, shorter than article 5 or 6, articles 5 and 6 subequal, article 6 with small spine on anterior margin at articulation with dactylus, dactylus long, curved, nearly 3/4 the length of article 6.

Uropod 1 (fig. 15): biramous, long and thin, peduncle extending just beyond tip of telson with 1 or 2 spines on outer distal corner; peduncle subequal to outer ramus; outer ramus with 5 stout spines along outer border, distal end quadrate with 1 short and 1 long spine, a subterminal spine arises from dorsal surface; inner ramus slightly longer than outer ramus with 2 or 3 bifurcate spines arising from dorsal surface, distal end quadrate with 2 subterminal spines and 1 short and 1 long terminal spine. Uropod 2 (fig. 16): biramous; peduncle short with 1 spine at each distal corner, peduncle reaches



Figures 9-14. *Neoxenodice cryophile* n. sp. Female: 9, antenna 2; 10, antenna 1; 11, peraeopod 1; 12, gnathopod 2; 13, peraeopod 2; 14, gnathopod 1.



Figures 15-19. *Neoxenodice cryophile* n. sp. Female: 15, uropod 1; 16, uropods 2 and 3, telson; 17, peraeopod 3; 18, peraeopod 4; 19, peraeopod 5.

tip of telson, about 3/4 length of outer ramus; outer ramus with 3 to 4 lateral spines, 1 subterminal stout spine and 1 short and 1 long terminal spine; inner ramus 1.4 times length of outer ramus, 1 to 2 spines along ramus, 2 subterminal spines, 1 short and 1 long terminal spine. Uropod 3 (fig. 16): short lobate peduncle with terminal seta, no rami.

Telson (fig. 16): about as long as wide, hemielliptical, entire, with 2 long terminal setae.

Remarks. - *Neoxenodice cryophile* differs from *N. caprellinoides*, the only other species in the genus, in the following characteristics.

	N. cryophile	*N. caprellinoides*
Body length	8 mm	11 mm
Eyes	well developed	absent
Antenna 1	1/2 body length	2/3 body length
Antenna 2	flagellum with 3 articles	flagellum with 6 articles
Gnathopod 2	palm convex	palm concave
Uropod 2	peduncle extends just past tip of telson	peduncle extends twice length of telson
Uropods 1 and 2	sparsely spinose	moderately spinose

In addition mature females of *N. cryophile* have only three pairs of oöstegites on peraeonites 2, 3 and 4, a characteristic as yet unknown for *N. caprellinoides*. Gammaridean amphipods usually have four pairs of oöstegites (Barnard, 1969) except *Caprogammarus gurjanovae* Kudrjaschov and Vassilenko, 1966, which has two pairs on peraeonites 2 and 3. Thus gammaridean amphipods show an even gradation of oöstegites from four to two through the families Podoceridae and Caprogammaridae. This lessens the importance of the caprellidean characteristic of two oöstegites and strengthens the case of McCain (1968) for merging the suborders Gammaridea and Caprellidea.

N. cryophile is known from the extremely cold stable waters off Cape Bird in McMurdo Sound and off Cape Hallett in Moubray Bay. At Cape Bird it lives in 30 to 200 m of water on gravel and sandy-mud bottoms in a community dominated by the tubicolous polychaete, *Spiophanes tcherniai* Fauvel, 1951. At Cape Hallett it was possible to observe specimens alive for a short time on the relatively undisturbed bottom collected in the sampling device. The animals were attached to the sandy-mud bottom by the last three peraeopods with their heads upright in the water. They moved in a typical caprellid fashion by attaching and detaching alternately the second gnathopods and last three peraeopods, thus inching from one area to another. I am inclined to believe that *N. cryophile* may be restricted in its distribution to the Ross Sea, for it has not been reported in any of the earlier collections from the Antarctic Peninsula nor is it reported by Bellan-Santini (1972) in the recent collections from Adelie Land.

SUMMARY

A new podocerid amphipod, *Neoxenodice cryophile*, is described from the extremely cold waters off Cape Bird and Cape Hallett, Antarctica. The female is unique in having only 3 pairs of oöstegites.

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Studies on the Macrobenthos of the Southern Ocean. 4. New Gammaridean Amphipoda from Port Pegasus, Stewart Island, New Zealand.

New Gammaridean Amphipoda from Port Pegasus, Stewart Island, New Zealand

James K. Lowry

Amphipods inhabiting New Zealand algae have been well studied by G.M. Thomson, C. Chilton, D.E. Hurley and J.L. Barnard (see J.L. Barnard, 1972). However, the species comprising the benthic fauna have received little attention. This paper describes 3 of the more abundant species collected by a series of grab samples from the North Arm of Port Pegasus, Stewart Island. Other species in the collection will be described at a later date.

The samples were taken during a howling gale and I heartily thank Mr Alex Black of the R.V. *Acheron*, Dunedin; Professor G.A. Knox and Messrs J.T. Kay, S.L. Bennington, and K.J. Sainsbury, Department of Zoology, University of Canterbury, Christchurch, for their cheerful assistance. I also thank Miss Suzanne Bullock who carefully inked in the line drawings.

Corophiidae

Photis nigrocula new species (figs 1-3)

Material examined. - Holotype, female, 4.3 mm, Z.Cr. ; allotype, male, Z.Cr. ; paratypes, 5 males, 10 females, Z.Cr. ; 5 males, 10 females, USNM ; North Arm, Port Pegasus, Stewart Island, New Zealand; sandy bottom, 45 m depth; 23 March 1972; J.K. Lowry.

Diagnosis. - *Photis nigrocula* differs from other photids in a combination of characters which includes the shape of the palm of gnathopod 2, the condition of the setae on article 4 of peraeopods 1 and 2, and the length ratio of the inner to outer ramus of uropod 3.

Description. - Female (figs 2, 3) 4.3 mm. Head: not quite as long as first 2 peraeonites; eyelobe small and triangular, eye not filling lobe; small, with many well developed ommatidia, nearly black at the centre, becoming clear at the edge. Antenna 1 (fig. 2G): slightly longer than antenna 2; peduncle longer than flagellum, article 1 tumid, subequal to article 3, article 2 longest; flagellum with 8 articles. Antenna 2 (fig. 2F): article 3 short, recurved below ocular lobe, articles 4 and 5 subequal; flagellum composed of 10 articles.

Mandible (fig. 2A): with well developed incisor; lacinia mobilis with 4 teeth; 5 serrated spines and 5 plumose setae project from the border between the lacinia mobilis and the triturating molar, a molarial flake covered with short hairs and bearing a serrated edge projects from the base of the molar; palp with 3 articles, article 2, 1.3 times longer than article 3, moderately setose, article 3 densely setose distally. Maxilla 1 (fig. 2C): inner plate small with a distal seta; outer plate broad, quadrate, well armed with 10 stout spines; palp with 2 articles; second longer, with 4 stout spines and 6 distal setae. Maxillipeds (figs 2D, E): inner plate subquadrate with 12 plumose setae, 4 short stout spines along distal margin; outer plate large, with 7 spines along inner margin, 2 brush-tipped spines and 1 seta along distal margin. Lower lip (fig. 2B): inner plates appear partially fused, outer plates large, with moderately developed mandibular lobes.

Gnathopod 1 (fig. 2H): coxa 1.5 times longer than broad, anteroventral corner slightly produced, setose along ventral margin; article 5, dorsal margin twice as long as ventral margin, subequal to dorsal margin of article 6; article 6, 1.6 times longer than wide with an oblique palm bordered by a stout spine. Gnathopod 2 (fig. 2I): larger, more robust than gnathopod 1; coxa 1.7 times longer than broad, anteroventral corner rounded, ventral margin sparsely setose; article 5 compressed, slightly lobate ventrally; article 6, 1.3 times longer than broad, palm acutely rounded at border defined by prominent spine; dactylus stout, with a serrated inner margin.

Peraeopod 1 (fig. 3A): coxa twice as long as broad, anteroventral corner rounded, setae along ventral margin; article 2 with well developed glands; article 4, anterior margin becoming densely setose towards produced anterodistal corner; articles 5 and 6 subequal, article 6 tapering distally with midlateral tuft of setae. Peraeopod 2 (fig. 3C): similar to peraeopod 1 except articles 4 and 6 are much less setose. Peraeopod 3 (fig. 3B): stout, coxa 1.5 times longer than broad with normal posterior lobe; article 2 as long as broad with plumose setae along anterior margin; articles 4 and 5 subequal, article 4 with 2 long setae at the posterodistal corner; article 6 longer than article 5 with a large and small spine at the distal extremity; dactylus short and stout, with rostrate cusps. Peraeopod 4 (fig. 3D): article 2 similar to that of peraeopod 3 except that it is not as broad and it has plumose setae along both borders; articles 4 and 6 have become greatly elongated and stouter than in peraeopod 3 as has the dactylus which is serrated ventrally near the tip. Peraeopod 5 (fig. 3E): very similar in size and proportion to peraeopod 4, differing mainly in article 2 which is not as setose and has an acute posterodorsal corner.

Uropod 1 (fig. 3F): 1.4 times longer than uropod 2; peduncle 1.5 times longer than inner ramus, with 7 spines along outer margin; inner ramus slightly longer than outer ramus, spines as illustrated. Uropod 2 (fig. 3H): peduncle short, subequal to rami, with 3 spines along inner margin, inner ramus longer than outer ramus, spines as illustrated. Uropod 3 (fig. 3G): without spines, slightly longer than outer ramus; outer ramus with 2 articles, the second with long setae; inner ramus with small distal spine, ramus about 1/4 length of outer ramus. Telson (fig. 3G): oval, broader than long with 2 knobs and 2 small setae located distally.

Male (fig. 1) 3.7 mm. Similar to female except in the following ways. Gnathopods slightly more robust. Gnathopod 1 (fig. 1B): palm oblique, slightly excavate defined by a prominent spine, rounded corner not produced; dactylus serrated along inner margin. Gnathopod 2 (fig. 1F): palm with slightly produced distal hump, slightly excavate with large spine bordering posterior edge. Peraeopod 4 (fig. 1D): greatly enlarged, about 1.5 times longer than peraeopod 5 and much more robust; article 6 moderately setose; article 7 without serrated inner margin.

Remarks. - *Photis nigrocula* and *P. brevicaudata* Stebbing, 1888, appear to be closely related species. Stebbing described his species from one female specimen about 2.5 mm long but with well developed oöstegites. The two species differ in the following characters.

	P. nigrocula	*P. brevicaudata*
Coxae 1-4	quadrate ventrally	rounded ventrally
Peraeopod 2	article 4 naked	article 4 setose
Uropod 3, length ratio of inner to outer ramus	1:4	1:6
Telson	distal knobs and setae	naked

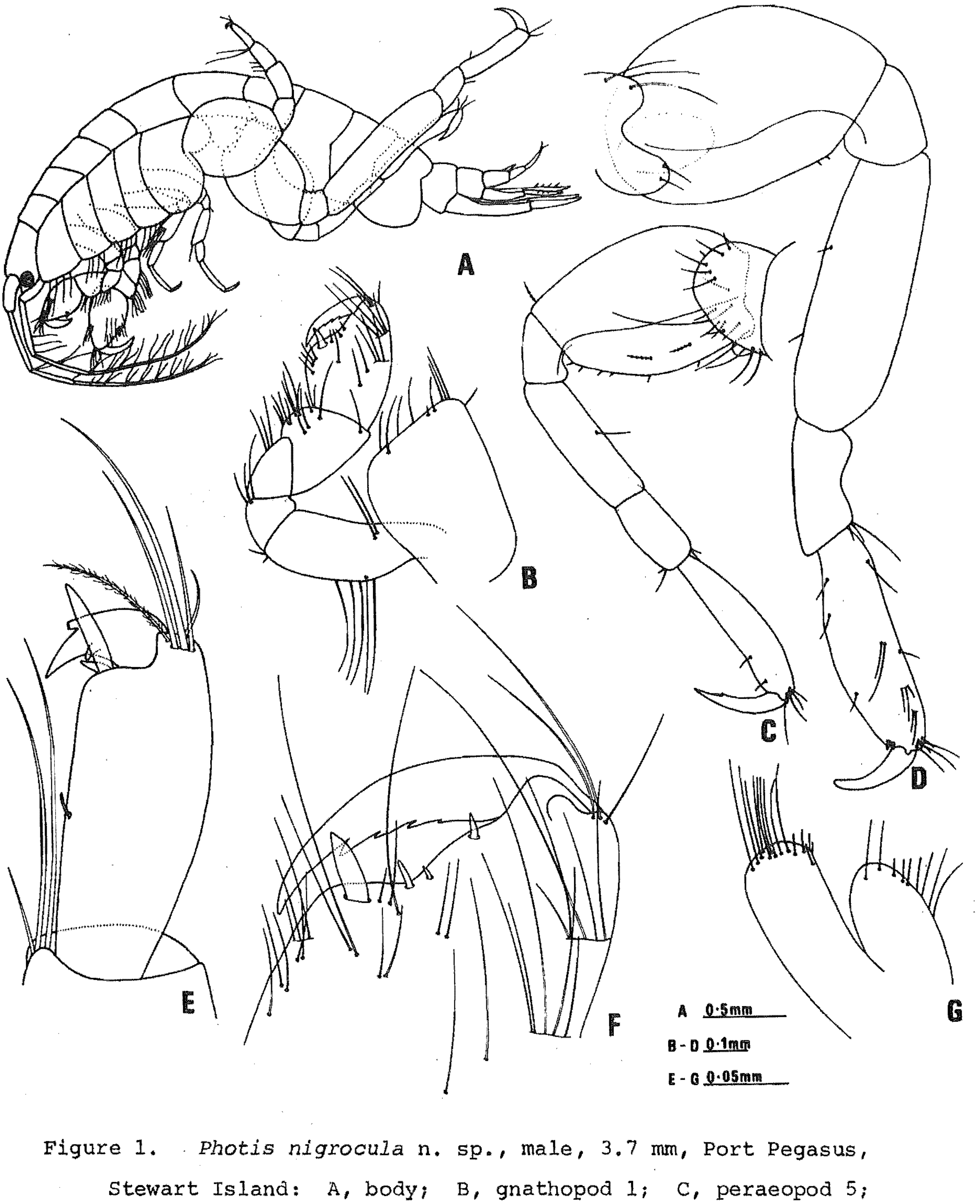

Figure 1. *Photis nigrocula* n. sp., male, 3.7 mm, Port Pegasus, Stewart Island: A, body; B, gnathopod 1; C, peraeopod 5; D, peraeopod 4; E, articles 6 and 7, peraeopod 3; F, palm and dactylus, gnathopod 2.

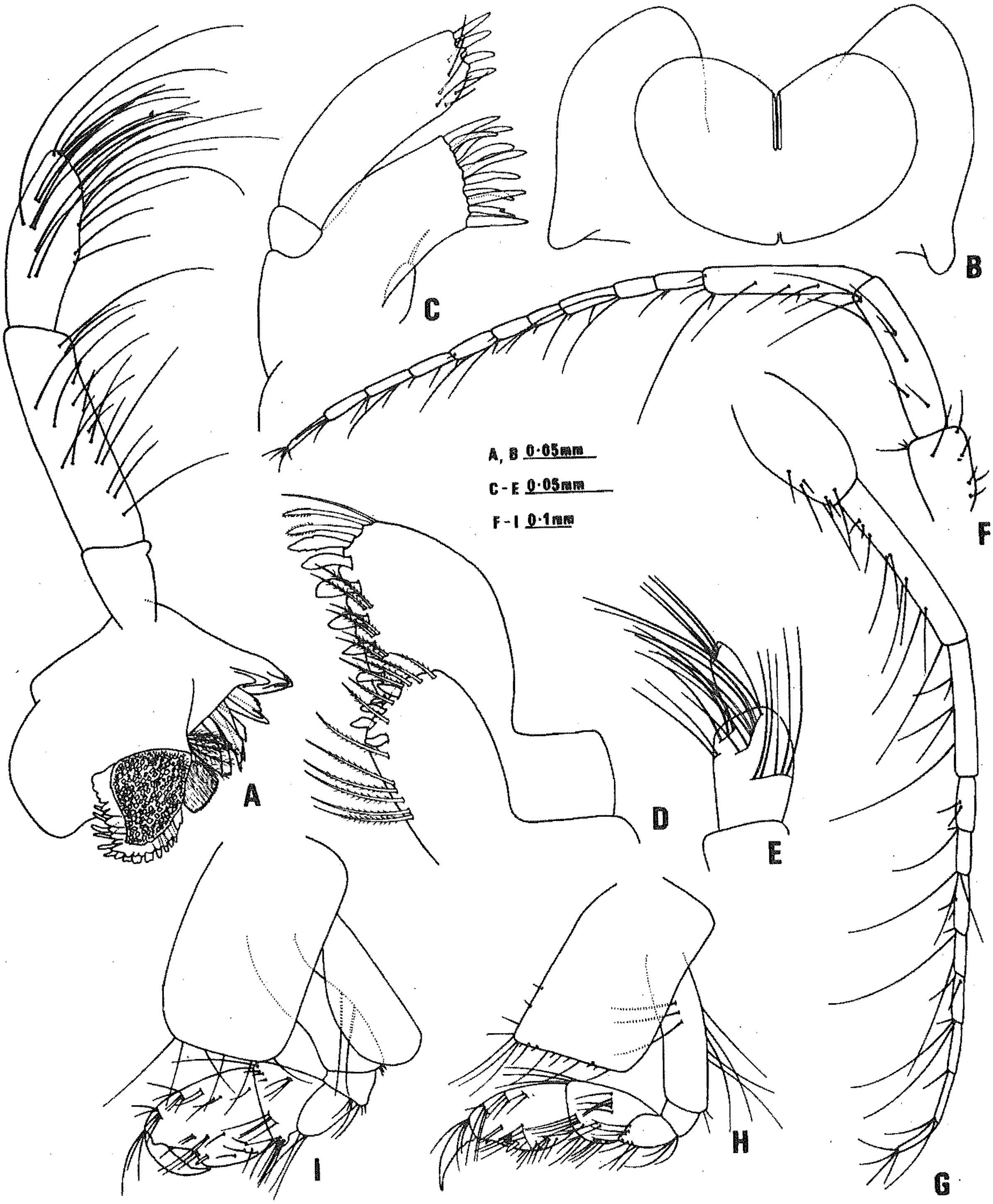

Figure 2. *Photis nigrocula* n. sp., female, 4.3 mm, Port Pegasus, Stewart Island: A, mandible; B, lower lip; C, maxilla 1; D, maxillipedal plates; E, articles 3 and 4, maxillipedal palp; F, antenna 2; G, antenna 1; H, gnathopod 1; I, gnathopod 2.

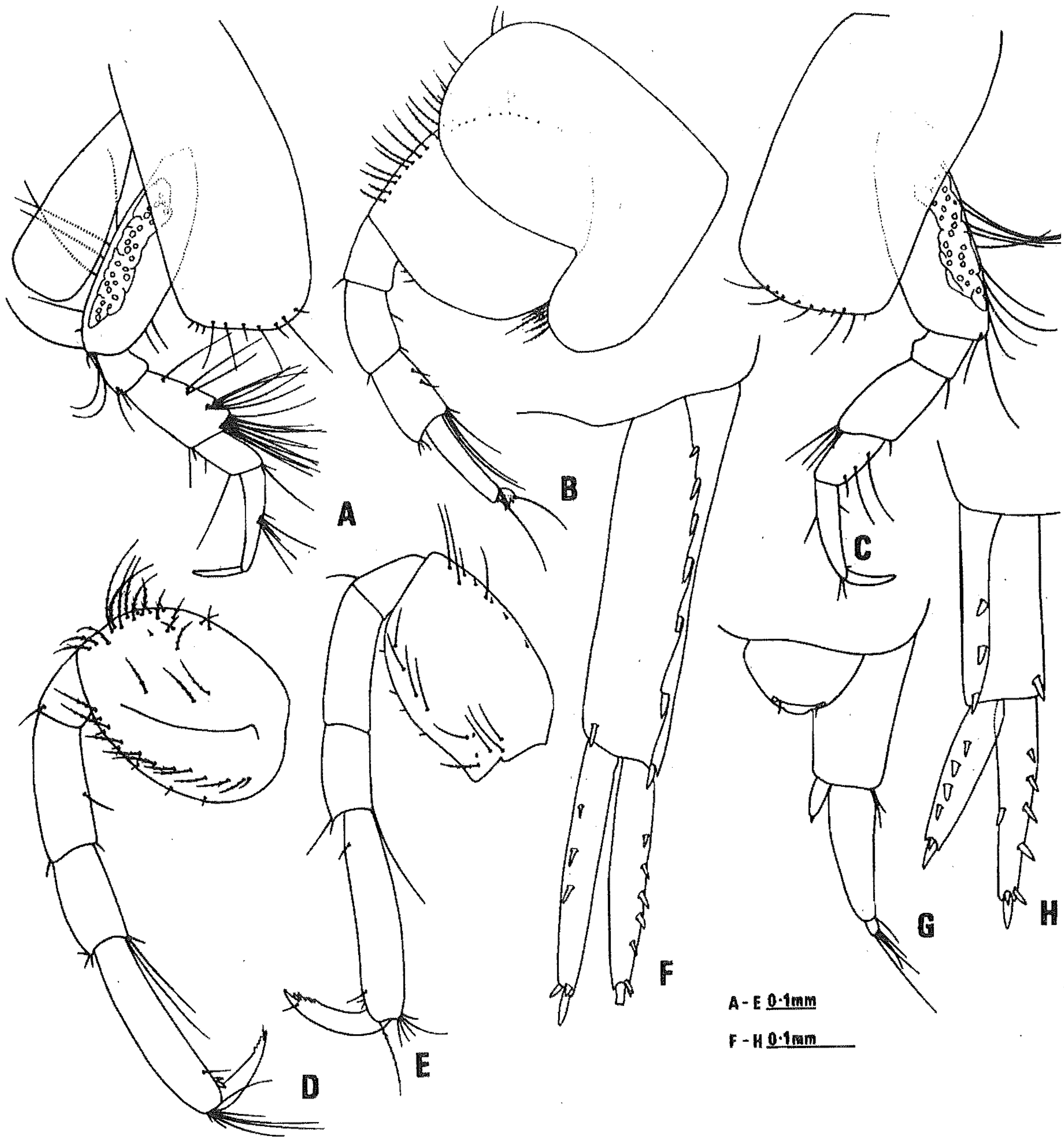

Figure 3. *Photis nigrocula* n. sp., female, 4.3 mm, Port Pegasus, Stewart Island: A, peraeopod 1; B, peraeopod 3; C, peraeopod 2; D, peraeopod 4; E, peraeopod 5; F, uropod 1; G, uropod 3 and telson; H, uropod 2.

They also differ in the shape of the palm of gnathopod 2, in the length to width ratios of the coxae and in the shape of article 2 of peraeopod 3. Because Stebbing (1888) had no males the condition of peraeopod 4 is not known. The specimens which Chilton (1921) identified as *P. brevicaudata* appear to be an undescribed species. Chilton's smallest immature specimens are larger than mature specimens of either *P. brevicaudata* or *P. nigrocula*. One large ovigerous female is 6.5 mm long. Furthermore the palms of the gnathopods are more excavate than in either of the other species. *P. nigrocula* is common on the sandy bottom in the North Arm of Port Pegasus, occurring in numbers of around 750/sq m. Adult males make up only 20% of the sampled population.

Photis phaeocula new species (figs 4-6)

Material examined. - Holotype, adult female, 3.6 mm, 8 eggs in marsupium, Z.Cr. ; allotype, adult male, 3.3 mm, Z.Cr. ; paratypes, 16 specimens, Z.Cr. ; 1 female, USNM ; North Arm, Port Pegasus, Stewart Island, New Zealand; sandy bottom, 43 m depth; 23 March 1972; J.K. Lowry.

Diagnosis. - Eyelobes long and deep; dactylus of peraeopod 3 long and thin, article 2 in the male with a downward projecting spine along the posterior border.

Description. - Female (figs 4, 5) 3.6 mm. Head (fig. 4A): not quite as long as first 2 peraeonite segments; eyelobe long and deep with eye filling lobe; eye with many well developed ommatidia, deep brown centre, becoming clear at the edge. Antenna 1 (fig. 5F): thin, with many long setae; peduncle slightly longer than flagellum, article 1 short, tumid, article 2 as long as articles 1 and 3 combined, article 3 longer than article 1; flagellum composed of 7 articles. Antenna 2 (fig. 5G): thin, with a few long and a few short setae; peduncle slightly shorter than flagellum, article 3 less than half as long as article 5, article 4 slightly shorter than article 5; flagellum composed of 13 articles.

Mandible (fig. 4D): incisor with 4 teeth, lacinia mobilis with 4 teeth; 6 serrated spines between lacinia mobilis and triturating molar; palp with 3 articles, article 2 moderately setose, 1.9 times longer than article 3, article 3 with many long, distal setae. Maxilla 1 (fig. 4C): very similar to *P. nigrocula*. Maxilla 2 (fig.

4E): inner plate rounded with a row of plumose setae extending from the lateral edge diagonally across the plate, setae becoming dense distally; outer plate densely setose distally. Maxillipeds (figs 4F, G): very similar to *P. nigrocula* except teeth along inner edge of outer plate not as well developed. Lower lip (fig. 4B): outer plates setose distally; inner plates broad with hairs along margin.

Gnathopod 1 (figs 4H, I): coxa short, about as long as broad; article 2 long and slender; article 4 setose along posterior border; article 5 not compressed, longer than article 6, setose along posterior border; article 6 not much wider than article 2, oval, over 2 times longer than wide, 5 tufts of setae cover lateral face, palm oblique with subconical spines, a large spine projecting about halfway along the palm; dactylus long, with short spines and setae along inner margin.

Gnathopod 2 (figs 4J, K): subequal to gnathopod 1; coxa short, broader than long; article 2 long and slender; article 4 setose along posterior border; article 5 compressed, anterior border nearly twice as long as posterior border, and just over half as long as anterior border of article 6; article 6 oval, very similar to article 6 of gnathopod 1 except slightly broader in relation to length.

Peraeopods 1 and 2 (figs 5D, E): very similar, slender, sparsely setose; article 2 long and slender, glands not obvious; article 4 subequal to article 6; article 6 long and slender. Peraeopod 3 (fig. 5A): short, stout; article 2 as long as broad, a few setae along anterior border; articles 4, 5 and 6 stout; dactylus long. Peraeopod 4 (fig. 5C): article 2 slender, 1.4 times longer than broad; articles 4 and 6 equal in length, dactylus long, 3/4 length of article 6, appearing 2-articulate with a long plumose seta near base. Peraeopod 5 (fig. 5B): article 2 twice as long as broad with slender setae along posterior border; article 4 shorter than article 6 which is considerably lengthened, with a large tuft of distal setae; dactylus long, appearing 2-articulate, 3/4 length of article 6.

Uropod 1 (fig. 5I): peduncle nearly twice length of outer ramus, with 4 spines along outer edge; outer ramus slightly shorter than inner ramus, with 4 small spines and 1 large terminal spine; inner ramus with 6 small spines and 1 large terminal spine. Uropod 2 (fig. 5H): extending to tip of uropod 1; peduncle 1.5 times length of outer ramus; outer ramus shorter than inner ramus. Uropod 3 (fig. 5J): peduncle slightly longer than outer ramus with 3 setae along outer edge; outer ramus with 2 articles, second very short, with 2 setae; inner ramus rudimentary, 1/6 length of outer ramus. Telson (fig. 5J): broader than long, rounded, with 2 knobs and 2 long setae distally.

Male, 3.3 mm, similar to female in most respects, but differing in the following manner. Peraeopod 3 (figs 6A, C): much larger and stouter; article 2 longer than broad, the posterior margin produced into a sharp, downward projecting spine; articles 3-7 enlarged but proportionally similar to female, article 6 with a short, stout spine and 2 clumps of long and short setae located distally; dactylus elongate as in female, with a plumose seta at the base and short setae along inner margin. Peraeopod 4 (fig. 6B): much larger than peraeopod 4 in the female; article 2 broadly produced postero-dorsally; article 4 greatly enlarged, about 1.4 times longer than article 6 and nearly twice as wide; article 6 with setae along posterior margin becoming denser at the distal extremity; dactylus nearly half the length of article 6 with short setae along inner margin.

Remarks. - *Photis phaeocula* and *P. nigrocula* occur together in Port Pegasus but they may be easily distinguished by the following characters.

	P. phaeocula	*P. nigrocula*
Eye lobes	large, rounded	small, triangular
Eyes	large, brown	small, nearly black
Coxal plates	about as long as broad, rounded ventrally	longer than broad, quadrate ventrally
Gnathopod 2	article 5 shorter than article 6	article 5 longer than article 6
Peraeopod 3	article 7 long	article 7 short with rostrate cusps

Peraeopod 3 in the male of *P. phaeocula* is larger and more highly modified than in *P. nigrocula*. In both species peraeopod 4 of the male is greatly enlarged, although it appears to be better developed in *P. nigrocula*. It is also well developed in the species that Chilton (1921) identified as *P. brevicaudata*. Enlarged fourth peraeopods of the male may be a peculiarity of species in this area, similar to the tendency towards short coxal plates which J.L. Barnard (1962) noticed in the photids from southern California. The only

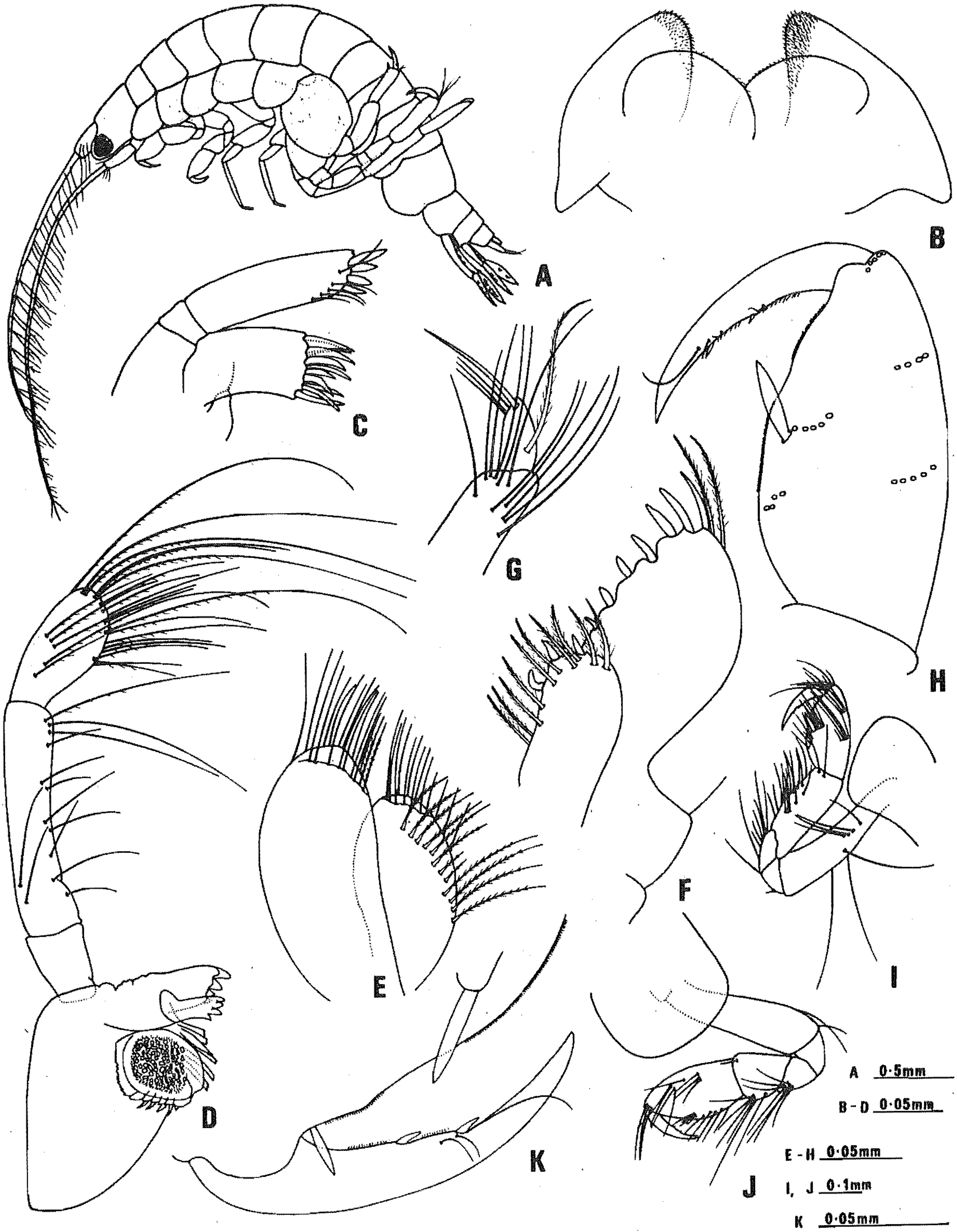

Figure 4. *Photis phaeocula* n. sp., female 3.6 mm, Port Pegasus, Stewart Island: A, body; B, lower lip; C, maxilla 1; D, mandible; E, maxilla 2; F, maxillipedal plates; G, articles 3 and 4, maxillipedal palp; H, articles 6 and 7, gnathopod 1; I, gnathopod 1; J, gnathopod 2; K, palm and dactylus, gnathopod 2.

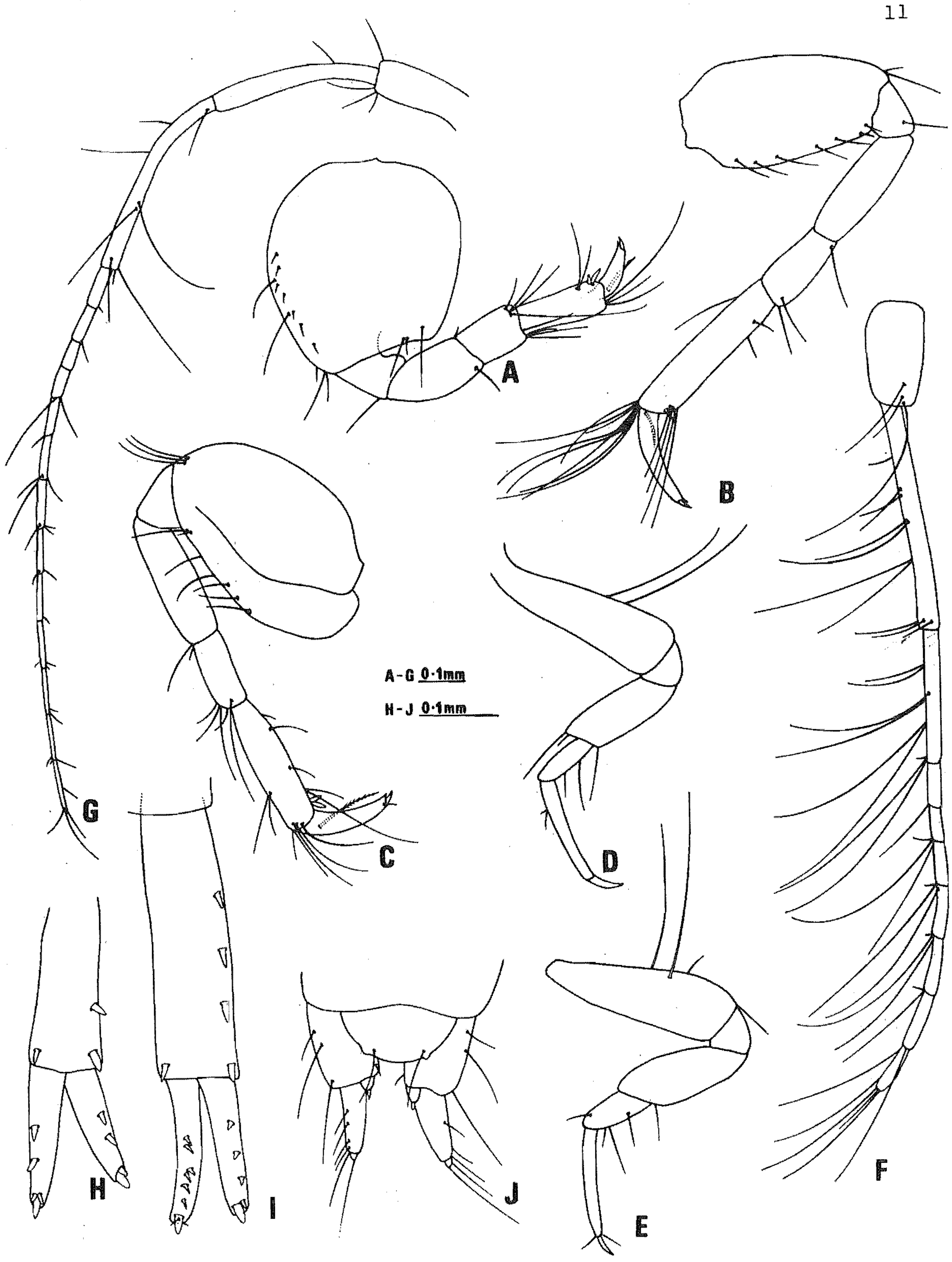

Figure 5. *Photis phaeocula* n. sp., female, 3.6 mm, Port Pegasus, Stewart Island: A, peraeopod 3; B, peraeopod 5; C, peraeopod 4; D, peraeopod 1; E, peraeopod 2; F, antenna 1; G, antenna 2; H, uropod 2; I, uropod 1; J, uropod 3 and telson.

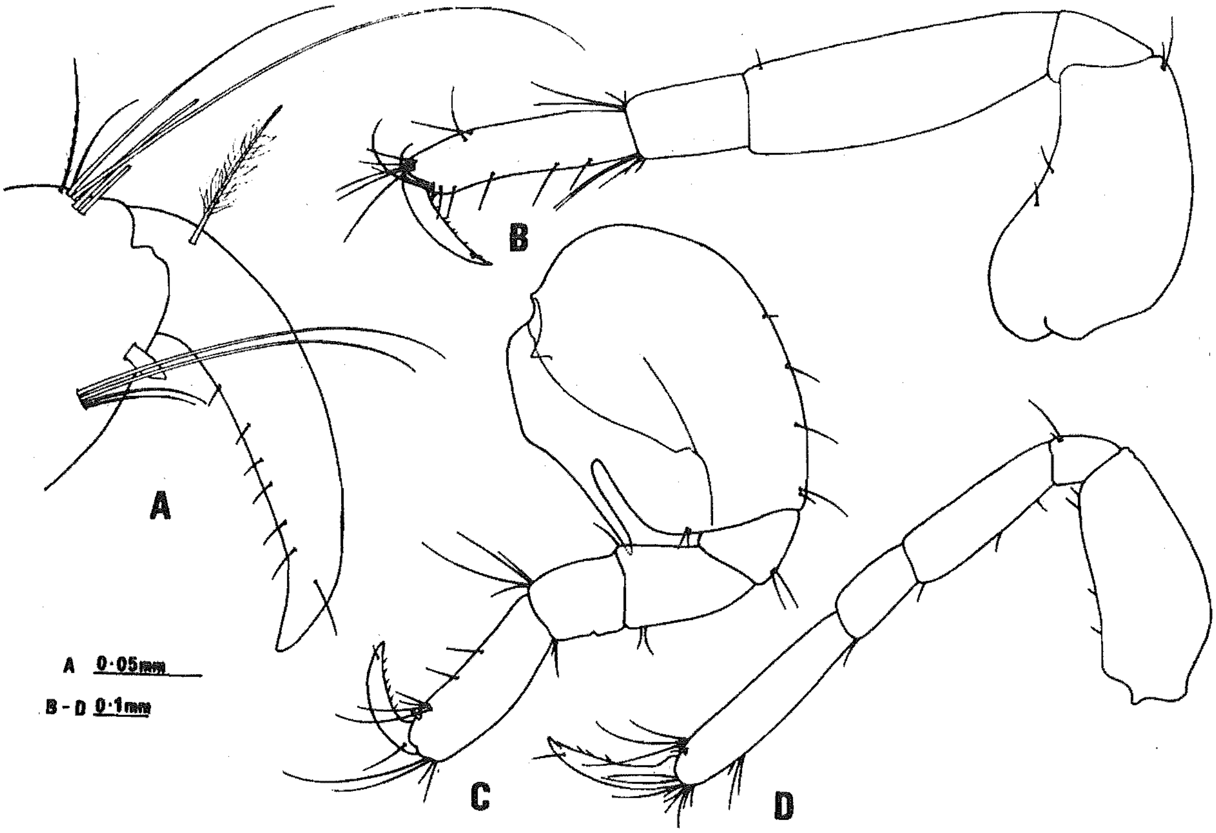

Figure 6. *Photis phaeocula* n. sp., male, 3.3 mm, Port Pegasus, Stewart Island: A, tip of article 6 and article 7, peraeopod 3; B, peraeopod 4; C, peraeopod 3; D, peraeopod 5.

other described species with enlarged fourth peraeopods is *P. elephantis* J.L. Barnard, 1962, but Barnard found only neuters in the population and concluded that the animals were abnormal due to disease. *P. phaeocula* has long eyelobes similar to the Australian species, *P. dolichommata* Stebbing, 1910, but they are much deeper. It has short coxal plates similar to the Californian species described by J.L. Barnard (1962), and it has the elongate article 5 of gnathopod 2 characteristic of *P. macrocarpus* Stebbing, 1888, from Kerguelen Island. *P. phaeocula* is not as common as *P. nigrocula* in Port Pegasus, occurring in numbers around 400/sq m. Adult males were found in only 14% of the sampled population.

Pardaliscidae

Halice sublittoralis new species (figs 7, 8)

Material examined. - Holotype, male, 7.0 mm, Z.Cr. ; allotype, female, 5.2 mm, Z.Cr. ; paratypes, 3 females, 2.0 mm, 4.3 mm and 4.8 mm, 2 males, both 5.6 mm, Z.Cr. ; 3 females, 3.7 mm, 5.0 mm and 6.0 mm, 2 males, both 6.4 mm, USNM ; North Arm, Port Pegasus, Stewart Island, New Zealand; sandy-mud bottom, 45 m depth; 23 March 1972; J.K. Lowry.

Diagnosis. - Article 3, 1/10 length of article 2 of the mandibular palp.

Description. - Male (figs 7, 8) 7.0 mm. Head (figs 7F, G): eyeless; well developed rostrum with midventral rib; projecting rounded anterolateral corners. Antenna 1 (fig. 7J): 1/2 body length; article 2 of peduncle 1/3 length of article 1, subequal to article 3; accessory flagellum with 3 articles, article 1 broad, long and subequal to peduncle; flagellum 4 times longer than peduncle, with 25 articles; article 1 conjoint, subequal to peduncle, dorsal surface densely covered with setae. Antenna 2 (fig. 7K): 3/4 body length; article 3 of peduncle compressed and tumid, article 4, 4.5 times longer than article 3, subequal to article 5; flagellum slightly shorter than peduncle, with 24 articles.

Mandibles (figs 7C, D): left mandible with broad, smooth cutting edge; lacinia mobilis with minutely serrated cutting edge bisected by a blunt tooth; incisor with 2 large spines and many setae; mandibular palp sparsely setose, with 3 articles, the third minute, 1/10 the length of article 2; right mandible with narrow, smooth cutting edge; lacinia mobilis with minutely serrated cutting edge, bordered with a sharp tooth; incisor; with 1 large spine and many setae; article 3 of mandibular palp apparently missing setae. Maxilla 1 (fig. 7B): palp with 2 articles, second with 10 spines; outer plate with 6 spines and 1 large plumose seta; inner plate reduced with 1 large plumose seta. Maxilla 2 (fig. 7A): outer plate quadrate with setae along outer edge, 1 large plumose seta and 2 smaller setae at distal end; inner plate with 9 median setae and 1 large plumose seta at distal end. Maxillipeds (fig. 7E): palp with 4 articles; outer plate well developed, distal cutting edge with 3 stout spines, median edge with 7 smaller spines and a few setae; inner plate reduced with 2 slender setae.

Gnathopod 1 (fig. 7H): simple, long and slender; coxal plate with a produced anterolateral corner, article 6 subquadrate, sparsely setose, longer than article 5. Gnathopod 2 (fig. 7I): simple; coxal plate rounded; article 6 longer than article 5, both subquadrate with setae in rows along posterior border; dactylus long and slender.

Peraeopods 1 and 2 (figs 8A, B): very similar, moderately setose; article 4 produced anterodistally with 1 seta; dactylus long and thin. Peraeopod 3 (figs 8F, I, J): shorter than peraeopod 4 or 5; article 2 produced anteriorly with 6 short setae along border; article 4 thin, subequal to article 2, serrated setae along anterior margin; article 5 subequal to article 2, serrated setae along anterior margin, sensory spines medially; article 6 with serrated setae along anterior margin; dactylus long and thin. Peraeopod 4 (fig. 8H): longer than peraeopod 5, sparsely setose; article 2 slightly expanded; article 4 longest. Peraeopod 5 (fig. 8G): articles 4 and 6 subequal.

Urosomites 4 and 5 (fig. 8L): each with a dorsal tooth. Uropod 1 (fig. 8D): peduncle slightly longer than rami; outer ramus slightly longer than inner ramus, sparsely setose with some large sensory spines. Uropod 2 (fig. 8E): peduncle slightly shorter than rami; outer ramus thinner and shorter than inner ramus, both sparsely setose with sensory spines. Uropod 3 (fig. 8C): peduncle 1/2 length of outer ramus; outer ramus with 2 articles, longer than inner ramus, both rami with bordering long plumose setae. Telson (fig. 8K): longer than peduncle of uropod 3, split nearly to the base, each lobe with a v-shaped notch bearing a large sensory spine.

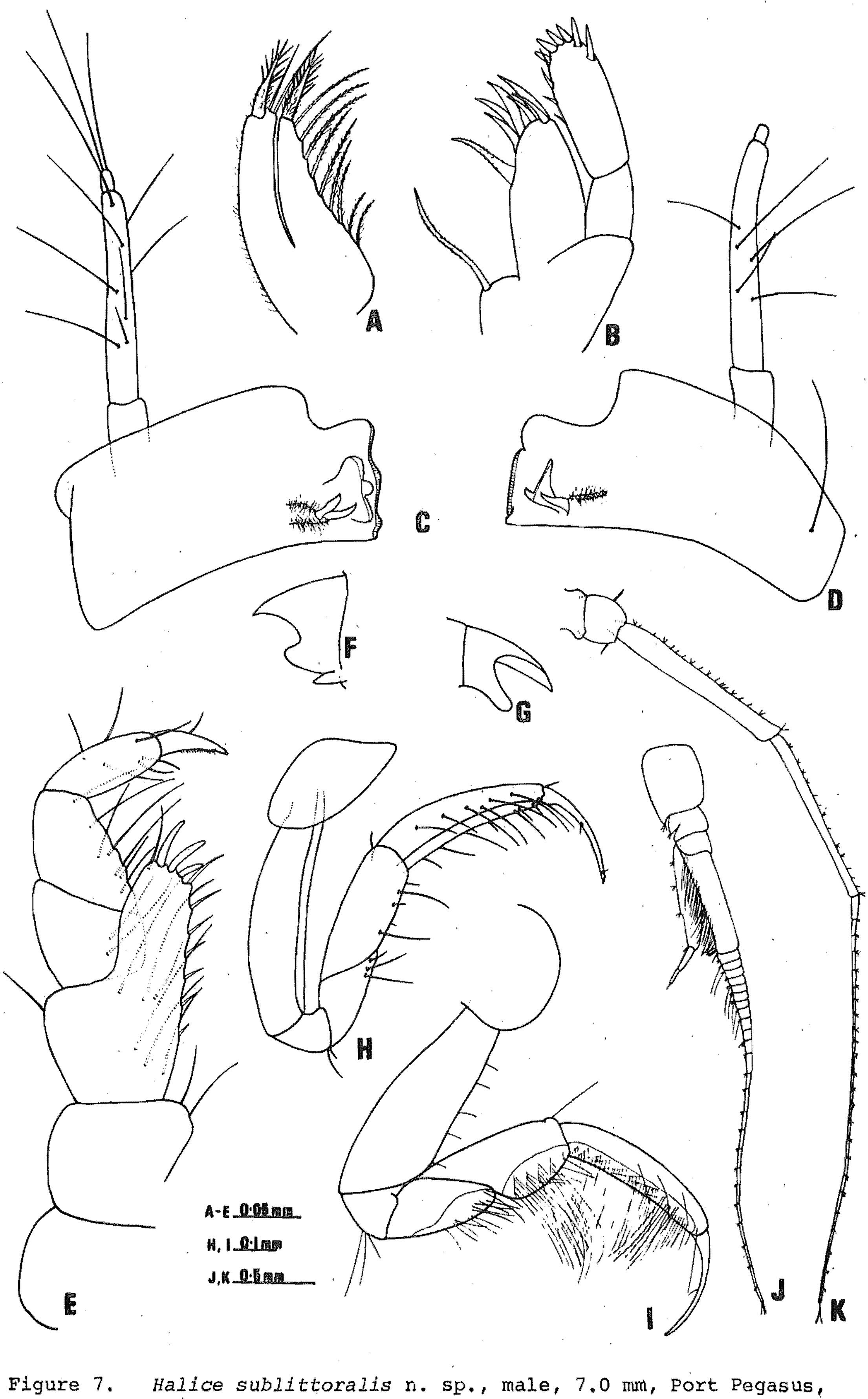

Figure 7. *Halice sublittoralis* n. sp., male, 7.0 mm, Port Pegasus, Stewart Island: A, maxilla 2; B, maxilla 1; C, left mandible; D, right mandible; E, maxilliped; F, head; G, head showing exposed midventral rib; H, gnathopod 1; I, gnathopod 2; J, antenna 1; K, antenna 2.

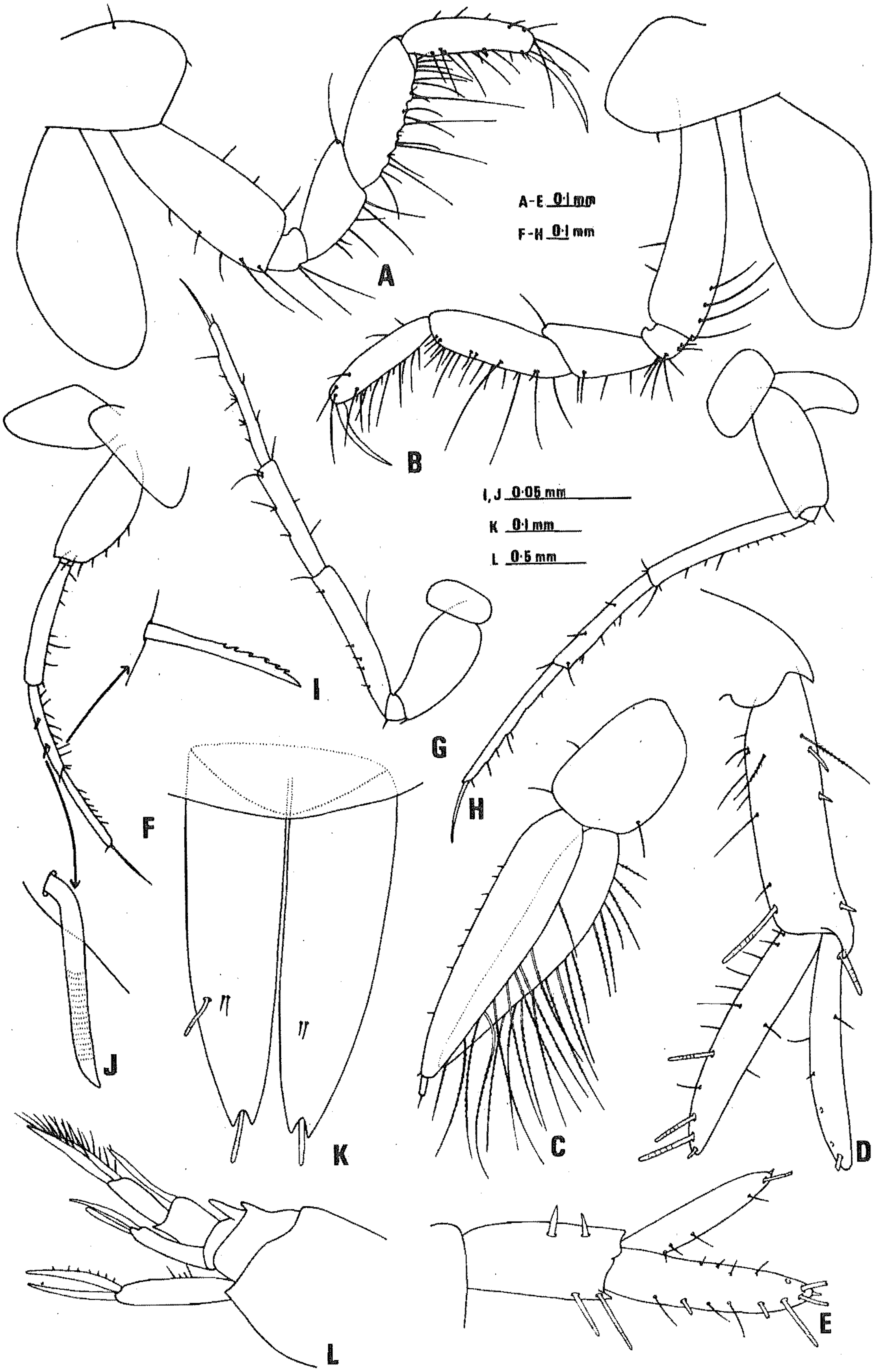

Figure 8. *Halice sublittoralis* n. sp., male, 7.0 mm, Port Pegasus, Stewart Island: A, peraeopod 1; B, peraeopod 2; C, uropod 3; D, uropod 1; E, uropod 2; F, peraeopod 3; G, peraeopod 5; H, peraeopod 4; I, sensory seta from article 4, peraeopod 3; J, sensory seta from article 4, peraeopod 3; K, telson; L, urosomites 3-6.

Remarks. - *Halice sublittoralis* displays the generic characters set forth by Birstein and Vinogradov (1962) and by J.L. Barnard (1971) except that peraeopod 4 is slightly longer than peraeopod 5. *H. sublittoralis* appears to be most closely related to *H. abyssi* Boeck, 1871, and *H. ulcisor* J.L. Barnard, 1971, but differs in the following characters.

	H. abyssi	*H. ulcisor*	*H. sublittoralis*
Rostrum	well developed	moderately developed	well developed
Article 1 of primary flagellum	conjoint	basally segmented	conjoint
Mandibular palp, length ratio of article 3 to article 2	1:5	1:7	1:10
Length of peraeopod 4 to peraeopod 5	equal	longer	longer

H. profundi K.H. Barnard, 1932, is considered by K.H. Barnard (1932) to be very like *H. abyssi*, but his scant description omits characters now considered to be of generic and specific importance. This makes detailed comparisons with *H. sublittoralis* impossible which is unfortunate since both species appear to be found in similar habitats.

This is the second record of this normally deep-sea genus in the New Zealand Area. K.H. Barnard (1930) reported *Halice secunda* (as *Synopioides macronyx*) from off the Three Kings Islands. At present *H. sublittoralis* is known only from Port Pegasus, Stewart Island, where it lives in 30-40 m of water in numbers around 60/sq m.

SUMMARY

Photis nigrocula, *P. phaeocula* and *Halice sublittoralis* are described from the North Arm of Port Pegasus, Stewart Island. They appear to be the most abundant amphipods on the sandy-mud bottom in that area.

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Studies on the Macrobenthos of the Southern Ocean. 5. Catalogue of the Marine Gammaridean Amphipoda of the Southern Ocean.

Epimeriella macronyx Walker
from Cape Bird, Ross Island

ABSTRACT

Based on the available literature, all of the 523 species and subspecies of marine gammaridean amphipods recorded south of 50°S latitude are catalogued. A synonymical bibliography is included for each species, along with complete distribution and depth records. General distribution data are given for species with extrinsic ranges. Nomenclatural changes and problems are cited, and the taxonomic history and zoogeography of the megafaunule is discussed. The catalogue is complete to the end of December 1974.

CONTENTS

Catalogue of the Marine Gammaridean Amphipoda of the Southern Ocean

James K. Lowry

INTRODUCTION

Since the work of J.L. Barnard (1969A) there has been considerable interest in amphipod taxonomy, and this is reflected in the Antarctic literature through the fine work of Bellan-Santini (1972A, B), Bellan-Santini and Ledoyer (1974), and Thurston (1972, 1974A, B). However, the taxonomy of the megafaunule is still in a fragmented state, and is scattered throughout many scientific journals and expedition reports. This is unfortunate because it is a very concise fauna with definite geographical boundaries and, as such, should be studied as a whole. In this regard, the following catalogue is the first step to bring the entire fauna together for inspection and, hopefully, to stimulate more detailed study. It includes 523 species and subspecies of marine gammaridean amphipods recorded in the literature south of 50°S latitude.

The family arrangement of the catalogue is based on the works of J.L. Barnard (1969A, 1972C, 1973A). The generic and specific names are usually those of the most recent author. A synonymical bibliography is given in chronological order for each species, and, in most cases, it is complete up to the end of December 1974. In the distribution section key place names (figure 1) are arranged in alphabetical order, followed by the distribution and depth records of each author. The depth range of each species is recorded at the end of the distribution section, and extrinsic distributions are recorded for those species found north of 50°S latitude. A list of abbreviated author names is on page 161, and a list of all geographic names, with their respective latitudinal and longitudinal coordinates, is on page 162.

Taxonomic History

There have been five periods in the description of the Southern Ocean amphipod fauna. The first period, from 1852 to 1888, includes the works of Dana, Heller, Miers, Smith, and Pfeffer, but is dominated by the works of Stebbing (figures 2, 3). In his studies on the Crustacea collected by the United States Exploring Expedition, Dana

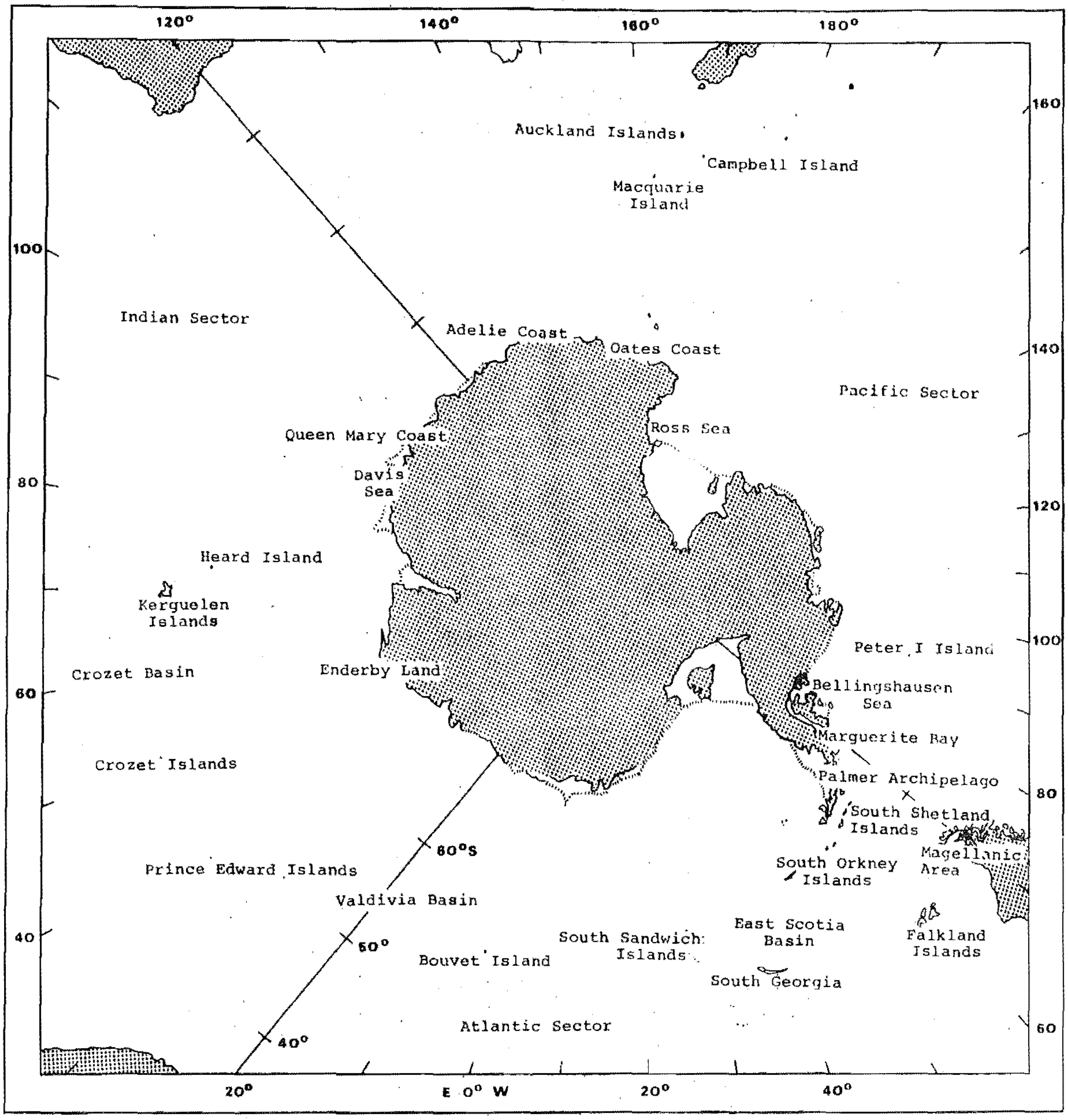


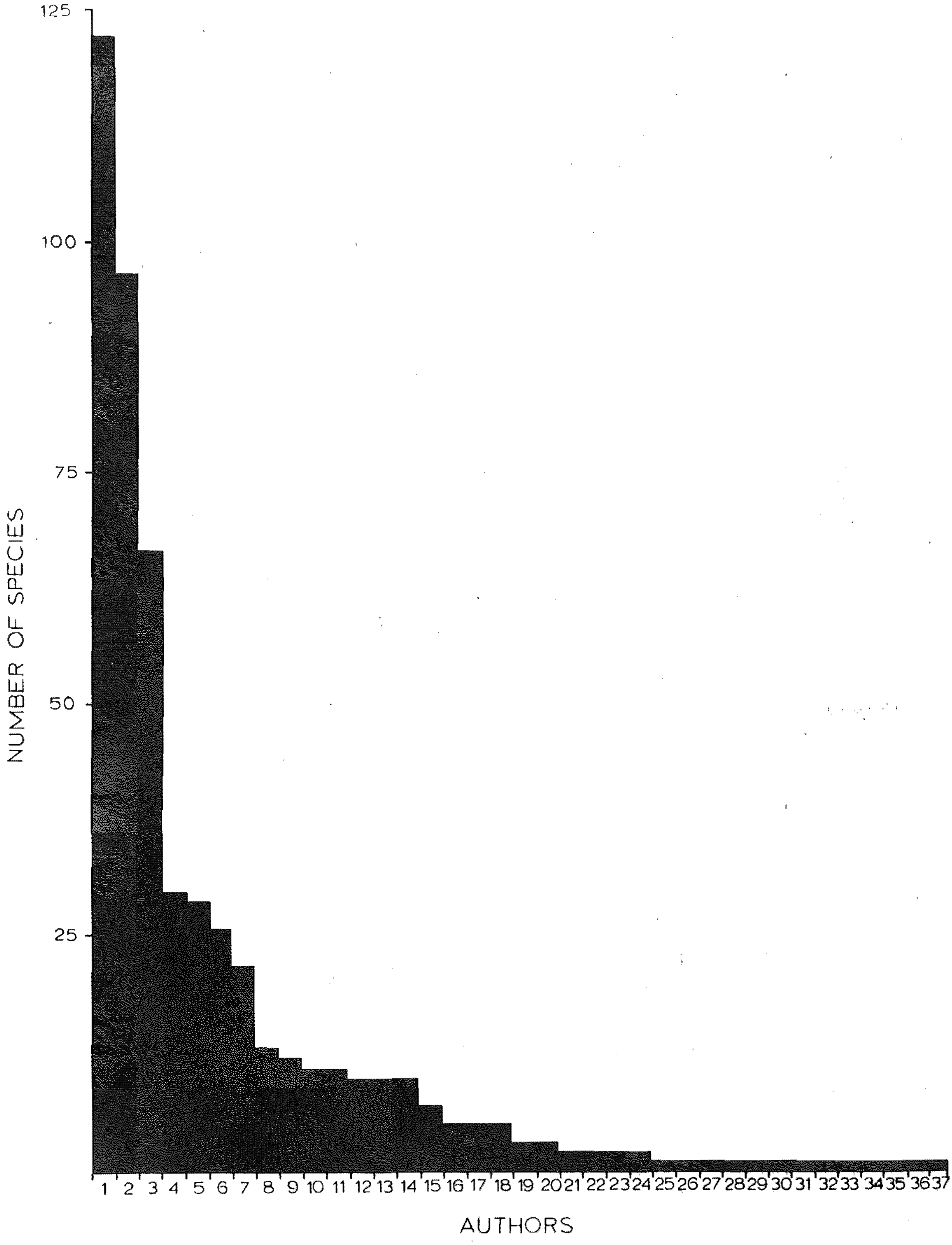
Figure 1. The Southern Ocean showing the key place names used in this catalogue.

(1852, 1853-55) described 10 new species of amphipods from the Magellanic area including the circumsubantarctic species *Hyale hirtipalma*. Heller (1865) described the important Magellanic species *Orchomene chilensis* from the collections of the frigate *Novara*. The *Erebus* and *Terror* made the first collection of amphipods in Antarctic waters while in the Ross Sea during the summer of 1841. The only species described was *Polycheria antarctica* (Stebbing, 1875).

The Kerguelen Islands were visited in the summer of 1874-1875 by American, British,and German Transit of Venus expeditions. Small reports on the amphipods appeared soon after by Miers (1975A, B, 1879) and Smith (1876). However, it was also during the summer of 1874-1875 that the H.M.S. *Challenger* visited the Kerguelen Islands and made this area one of its most extensive dredging sites. From these collections, Stebbing (1888) described 51 new gammaridean species, making the amphipod fauna of the Kerguelen Islands one of the best known Subantarctic faunas. The only other important paper during this period was the work of Pfeffer (1888) which described 10 new species from South Georgia including such characteristic Antarctic forms as *Bovallia gigantea, Eurymera monticulosa, Jassa ingens* and *Paraceradocus miersi*.

The second period in the description of the fauna began around the turn of the twentieth century as the exploration of the Southern Ocean intensified. During this time the Scotia Arc, the Antarctic Peninsula, the Ross Sea, the Adelie Coast, and the Davis Sea were thoroughly investigated. The collections from this exploration stimulated 20 papers on amphipod taxonomy between 1903 and 1914, four of which are particularly important. The taxonomic load during this period was shared by Walker and Chevreux with small contributions by Chilton, Stebbing and Shoemaker. Walker (1903A, 1907) studied the collections of the National Antarctic Expedition to McMurdo Sound. He described 28 new species from the Ross Sea, nearly half of which were in the family Lysianassidae. Chevreux (1906E, 1913) studied the collections of the French Expeditions, 1903-1905 and 1908-1910, to the western side of the Antarctic Peninsula. In his excellent monographs he described 23 new species from this area including the important infaunal species, *Ampelisca bouvieri* and the circum-antarctic species, *Iphimediella margueritei*. Chilton (1912) studied the collections of the Scottish National Antarctic Expedition to the Scotia Arc and Coats Land. He described four new species but

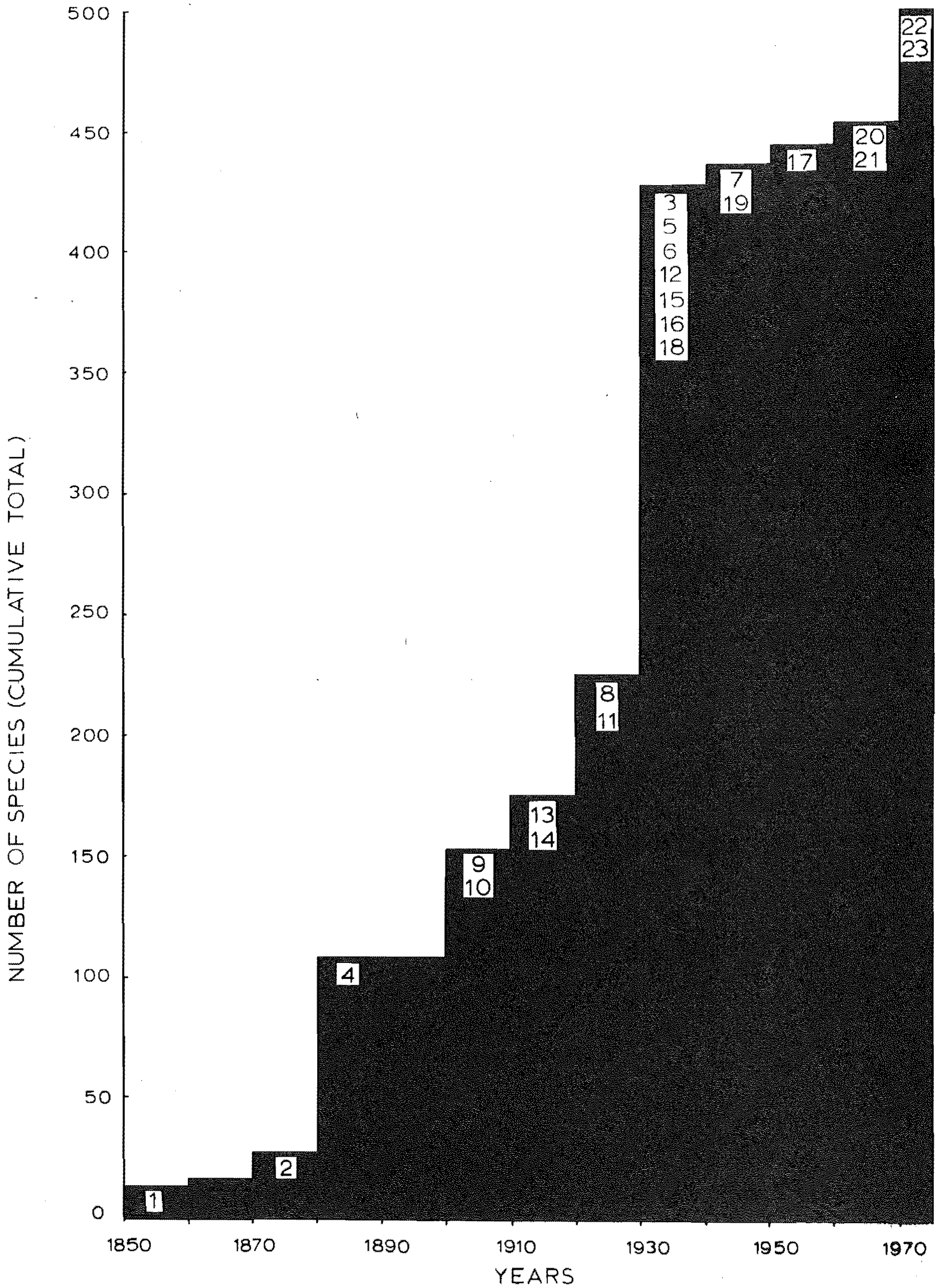
Figure 2. Number of species contributed by each author to the marine gammaridean megafaunule of the Southern Ocean: 1. A. Schellenberg (123); 2. K.H. Barnard (97); 3. T.R.R. Stebbing (67); 4. E. Chevreux (30); 5. A.O. Walker (29); 6. G.E. Nicholls (26); 7. M.H. Thurston (22); 8. J.D. Dana (13); 9. J.L. Barnard (12); 10. D. Bellan-Santini (11); 11. G.M. Thomson (11); 12. D. Bellan-Santini and M. Ledoyer (10); 13. G. Pfeffer (10); 14. K. Stephensen (10); 15. S. Ruffo (7); 16. Y.A. Birstein and M.E. Vinogradov (5); 17. C. Chilton (5); 18. W.A. Haswell (5); 19. S. Bate (3); 20. H.N. Kroyer (3); 21. R.O. Cunningham (2); 22. E. Dahl (2); 23. D.E. Hurley (2); 24. E.J. Miers (2); 25. P.C. Abildgaard (1); 26. A. Boeck (1); 27. C. De Broyer (1); 28. H. Filhol (1); 29. C. Heller (1); 30. Lichtenstein (1); 31. W. Liljeborg (1); 32. H. Milne Edwards (1); 33. T. Monod (1); 34. G. Montagu (1); 35. T. Say (1); 36. C.R. Shoemaker (1); 37. S.I. Smith (1).


125
100
75
50
25
NUMBER OF SPECIES
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37
AUTHORS

unfortunately the paper was marred by what Hurley (1965C) refers to as "large scale lumping". Chilton (1912) synonymized the Magellanic species *Orchomene chilensis* with seven other valid species, and this caused considerable confusion until Hurley (1965C) redescribed *O. chilensis*. Stebbing (1914) described a small collection of amphipods from the Falkland Islands which contained three new species, and Shoemaker (1914) reported on a small collection from South Georgia.

The third period, between 1925 and 1938, was the most productive in the history of Antarctic amphipod taxonomy. Collections from many of the earlier expeditions were studied and nearly half of the present fauna was described (figure 3). Schellenberg and K.H. Barnard made the most important contributions to this period (figure 2). Schellenberg (1926A) described 40 new species collected by the German South Polar Expedition to the Davis Sea in the first major work on the amphipods of the Eastern Antarctic. He then studied the early Swedish and German collections from the Magellanic area and the Scotia Arc, and in 1931 published a monograph describing 77 new species from these areas. In all, Schellenberg studied 247 species from the Southern Ocean and described 120 new species. Two of his papers (1926A, 1931) contain extensive sections on the zoogeography of the Antarctic amphipods. K.H. Barnard (1930, 1931A, 1932) also played a major role in the description of the Southern Ocean amphipod fauna. His first major work (1930) reported on the collections of the British Antarctic *Terra Nova* Expedition and the National Antarctic Expedition, *Nimrod*, from the Ross Sea. This paper contains 16 new species descriptions including some very interesting species of Acanthonotozomatidae. In his *Discovery Report*, K.H. Barnard (1932) considered 192 species of gammaridean amphipods and described 64 new species from the Falkland Islands, the Scotia Arc, and the Antarctic Peninsula. Nicholls (1938) studied the collections of the Australasian Antarctic Expedition from the Adelie Coast, and described 26 new species. Monod (1926), in a report on the peracarids collected during the voyage of the *Belgica* described only part of the amphipod collections. Stephensen (1927) wrote the most comprehensive account of the New Zealand Subantarctic amphipod fauna, in a paper which reported 28 species from the Auckland Islands. However, in a further report (1938) on the amphipods of the New Zealand Subantarctic and South Georgia he added little new information from either area.

Figure 3. The chronological description of the marine gammaridean megafaunule of the Southern Ocean. Numbers refer to expeditions which have contributed significant collections: 1. United States Exploring Expedition, 1838-1842; 2. Voyage of H.M.S. *Erebus* and *Terror*, 1839-1843; 3. Schwedische *Eugenie* Expedition, 1851-1853; 4. Voyage of H.M.S. *Challenger*, 1873-1876; 5. Hamburger Magalhaenische Sammelreise, 1892-1893; 6. Schwedische Expedition nach den Magellansländern, 1895-1897; 7. Expedition Antarctique Belge, 1897-1899; 8. Deutschen Tiefsee-Expedition, 1898-1899; 9. *Southern Cross* Antarctic Expedition, 1898-1900; 10. National Antarctic Expedition, 1901-1904; 11. Deutsche Südpolar-Expedition, 1901-1903; 12. Schwedische Südpolar Expedition, 1901-1903; 13. Expédition Antarctique Francaise, 1903-1905; 14. Deuxième Expédition Antarctique Francaise, 1908-1910; 15. British Antarctic (*Terra Nova*) Expedition, 1910-1913; 16. Australasian Antarctic Expedition, 1911-1914; 17. Captain C.A. Larsen's Expedition to the Ross Sea, 1923-1924; 18. *Discovery* Expedition, 1925; 19. Norwegian Antarctic Expeditions, 1927-1928; 20. *Vema* Cruises, 1953-1961; 21. Sovetskaia Antarkticheskaia Exspeditsiia, 1955-1958; 22. XIIème et XVème Expéditions Antarctiques Francaises en Terre Adélie, 1962-1965; 23. Operation Tabarin, Falkland Islands Dependencies Survey, and British Antarctic Survey, 1944-1965.


500
450
400
350
300
250
200
150
100
50
0
NUMBER OF SPECIES (CUMULATIVE TOTAL)
1850
1870
1890
1910
1930
1950
1970
YEARS
1
2
4
9
10
13
14
8
11
3
5
6
12
15
16
18
7
19
17
20
21
22
23

Between 1938 and 1962 there was not much interest in Southern Ocean amphipod taxonomy. Stephensen (1947) reported on an interesting collection made by the Norwegian Antarctic Expedition to such seldom visited areas as Bouvet Island, Peter I Island and the South Sandwich Islands, as well as South Georgia and the Antarctic Peninsula. Of the 58 species in the collection only two were new, but the ranges of a number of species were extended. Ruffo (1949) studied part of the *Belgica* collections from the Bellingshausen Sea, another infrequently visited area, and described seven new species, while Dahl (1954) reported 12 species from the Ross Sea including two new species and five additional range extensions.

The present period in Southern Ocean amphipod taxonomy coincides with the increased activity in Antarctica following the International Geophysical Year. J.L. Barnard (1962D) described eight new abyssal amphipods dredged in the basins east of the Scotia Arc. Birstein and Vinogradov (1962A) reviewed the pelagic Gammaridea of the Southern Ocean, based on the collections of the *Ob*. The two latter authors recorded 24 species, three of which were new and nine of which were new records for the Southern Ocean. Recently, Bellan-Santini (1972A, B) has reported on the collections of the French Antarctic Expeditions to Adelie Land. In these works she described 10 new species and redescribed a number of old species. Her papers successfully bring up to date the gammaridean amphipods of the Adelie Coast, a fauna not studied since Nicholls (1938). In addition Bellan-Santini and Ledoyer (1974) have made a thorough examination of the gammaridean amphipods collected between 1964 and 1971 from Kerguelen and the Crozet Islands. This is the first major work since Stebbing (1888) from that area and increases the fauna to over 80 species. Similarly Thurston (1972, 1974A, B) has studied the collections of the British Antarctic Survey mainly from the Scotia Arc and the Antarctic Peninsula. He has described 18 new species, redescribed several ill-defined species and revised the taxonomically confused genera, *Schraderia* and *Oradarea*.

Nomenclatural Changes and Taxonomic Problems

Because this catalogue is based entirely on published literature there are very few nomenclatural changes not previously published. However, in several cases, in order to clarify existing problems, changes have been made and these are outlined below.

1. J.L. Barnard (1962A) believed that separating genera along a serial gradation was artificial. However, while studying the '*Gammaropsis*' complex, he assigned species with 3 or more articles in the accessory flagellum to *Eurystheus* Bate; species with 1 or 2 articles in the accessory flagellum to *Megamphopus* Norman; and species lacking an accessory flagellum were placed in *Podoceropsis* Boeck. This was done for taxonomic convenience and ease of identification. In this arrangement a number of species previously assigned to *Eurystheus* were transferred to *Megamphopus* as were several species of *Podoceropsis*, including the only Southern Ocean representative, *P. elephantis* K.H. Barnard. *Pseudeurystheus* Schellenberg could not stand because the elongate condition of article 5 of the male gnathopod 2 was not considered a generic character. Because of its 3-articulate accessory flagellum it was assigned as a subgenus under *Eurystheus*. *Megamphopus blaisus* K.H. Barnard was considered very similar to *Pseudeurystheus sublitoralis* Schellenberg, except that it had a 2-articulate accessory flagellum. Thus it was assigned to the subgenus *M.* (*Segamphopus*) J.L. Barnard in the genus *Megamphopus*. Barnard (1962A) pointed out that this classification did not show how closely related the two species really were.

J.L. Barnard (1969A) synonymized *Gammaropsis* Liljeborg with *Eurystheus* but left his previous subgeneric concepts intact. Thus, in the Southern Ocean megafaunule *Gammaropsis* contained the subgenera *G.* (*Gammaropsis*) (3 or more articulate accessory flagellum and article 5 of gnathopod 2 (male) subequal to article 6) and *G.* (*Pseudeurystheus*) (3 or more articulate accessory flagellum and article 5 of gnathopod 2 (male) at least 1.5 times as long as article 6). The genus *Megamphopus* contained the subgenera *M.* (*Megamphopus*) (1 or 2 articulate accessory flagellum and article 5 of gnathopod 2 (male) subequal to article 6) and *M.* (*Segamphopus*) (1 or 2 articulate accessory flagellum and article 5 of gnathopod 2 (male) at least 1.5 times as long as article 6). J.L. Barnard (1973A) relegated *Megamphopus*, *Podoceropsis*, *Pseudeurystheus* and *Segamphopus*, among others, to subdivisions of *Gammaropsis*. In this scheme species with a 3 or more articulate accessory flagellum and article 5 of gnathopod 2 (male) subequal to article 6 are considered ordinary *Gammaropsis*; species with a 1 or 2 articulate accessory flagellum, male gnathopods 1 and 2 very similar or article 5 of male gnathopod 2 dominating a short article 6, fall into the subdivision *Megamphopus*; species normally without an accessory flagellum, but occasionally 1 or 2 articulate, and article 5 of gnathopod 2 (male) elongate, fall into the subdivision *Podoceropsis*; species with a 3 articulate accessory flagellum and article 5 of gnathopod 2 (male) at least 1.5 times as long as article 6 fall into the subdivision *Pseudeurystheus*; and species with a 1 or 2 articulate accessory flagellum but otherwise like *Pseudeurystheus* fall into the subdivision *Segamphopus*. Barnard also considered an unnamed division for species like the ordinary *Gammaropsis* but with a 0 to 2 articulate flagellum.

Thurston (1974A) re-examined *Megamphopus blaisus* K.H. Barnard (= *Gammaropsis* (*Segamphopus*) *blaisus* under J.L. Barnard, 1973A) and found that it had a 3 articulate accessory flagellum. Since it agreed in all other respects with *Pseudeurystheus sublitoralis* Schellenberg (= *Gammaropsis* (*Pseudeurystheus*) *sublitoralis* under J.L. Barnard, 1973A) Thurston synonymized the two species. This left *Segamphopus* without a species and elevated *Pseudeurystheus* back to generic rank. Thurston (1974B) has preferred to maintain separate generic status for *Gammaropsis*, *Megamphopus*, *Podoceropsis* and *Pseudeurystheus*. In this catalogue Barnard's (1973A) subdivisions *Megamphopus*, *Podoceropsis*, and *Pseudeurystheus* are given subgeneric rank in the genus *Gammaropsis*. *Segamphopus* is synonymized with *Pseudeurystheus* and Barnard's unnamed subdivision is left as such to avoid adding to the nomenclatural confusion. This should be considered a transitional step until someone undertakes a thorough revision of the group.

2. *Eusirus tridentatus* Bellan-Santini and Ledoyer (1974) has been erected for the "high" Antarctic form of *E. antarcticus* Thomson, based on specimens from the Kerguelen Islands, the Adelie Coast, and the Chilean Antarctic Expedition. Thurston (1974B) examined specimens from a number of localities throughout the Southern Ocean and came to the conclusion that *E. antarcticus* is a widely distributed highly variable species. For the present *E. tridentatus* is considered a junior synonym of *E. antarcticus*.

3. The genus *Gondogeneia* J.L. Barnard was created to incorporate a species flock previously assigned to *Pontogeneia* Boeck. Since then all species in the Southern Ocean have been placed in *Gondogeneia*. Based on the fact that the *Pontogeneia* concept is now restricted to a few species in the high northern hemisphere (J.L. Barnard, 1972A), the unidentified *Pontogeneia* species 1 to 4 are also placed in *Gondogeneia*.

4. J.L. Barnard (1972C), Bellan-Santini and Ledoyer (1974), and Thurston (1974B) have all discussed the problems concerned with Schellenberg's (1931) sweeping synonymy of the Subantarctic '*Paramoera*' complex. Their remarks indicate that until well illustrated redescriptions of original material are completed the longstanding confusion will persist. This is particularly evident in the nomenclatural tangle between *Paramoera fissicauda* (Dana), type locality, Valpariso, Chile; *P. austrina* (Bate), type locality, Sydney, Australia; and *P. australis* Miers, type locality, Kerguelen Islands. These names have been used interchangeably for years to identify a range of species. For instance, J.L. Barnard (1972C) felt that the *P. austrina* of Walker (1908) was actually *Gondogeneia subantarctica* (Stephensen). Thurston (1974B) checked the specimens which Chilton (1912) attributed to *P. austrina* and found that they belonged to *Pontogeneiella longicornis* (Chevreux) and *P. brevicornis* (Chevreux). Bellan-Santini and Ledoyer (1974) have resurrected *P. austrina* for their specimens from the Crozet Islands. However, for the purposes of this catalogue the nomenclature is left merged in confusion until more of the early specimens can be redescribed.

5. Bousfield (1965) erected the subfamilies Pontoporeiinae and Haustoriinae in the family Haustoriidae. Although he placed *Urothoe* Dana in the Pontoporeiinae he suggested that it might require a separate subfamily. He refrained from placing *Cardenio* Stebbing, *Phoxocephalopsis* Schellenberg, and *Urothoides* Stebbing in either subfamily, but suggested instead "further studies of their subfamily affinities, based on fresh material."

6. *Orchomenella gaussi* Strauss, 1909: 63, (nomen nudum).

7. J.L. Barnard (1964A) emended the diagnosis of *Orchomene* Boeck to include *Orchomenella* Sars, *Orchomenopsis* Sars, and *Allogaussia* Schellenberg, and included all species described in these genera before J.L. Barnard (1958B) in a key to *Orchomene*. J.L. Barnard (1969A) listed the genus *Allogaussia*, but included its species under *Orchomene*. Bellan-Santini (1972A) stated that only *A. galeata* Schellenberg and *A. macrophthalma* Birstein and Vinogradov represented the original concept of *Allogaussia*. She concluded that because of the heterogeneity of the species in the *Orchomene* concept it should include *Allogaussia* as J.L. Barnard (1969A) had proposed. In this catalogue all of the Southern Ocean representatives of *Allogaussia* are placed in *Orchomene* including *A. macrophthalma* which was not included in J.L. Barnard (1964A).

8. J.L. Barnard (1962D) synonymized *Tmetonyx* Stebbing with *Tryphosa* Sars. He later (1969A) discovered that *Tryphosa* had to be synonymized with *Orchomene* Boeck, and the *Tryphosa* concept was given the next available name, *Tryphosella* Bonnier. At the same time *Tmetonyx* and *Tryphosa* were reinstated to include their type species. Thus all Antarctic species previously known as *Tryphosa* or *Tmetonyx* fall under the name *Tryphosella* except '*Anonyx*' *cicadoides* Stebbing, '*Tryphosa*' *carinata* Schellenberg, and those species removed to *Hippomedon* Boeck and *Uristes* Dana.

9. *Tryphosa serrata* Schellenberg (1931: 34) and *Tmetonyx serratus* Schellenberg (1931: 40) were originally described in different genera. However, when J.L. Barnard (1962D) synonymized *Tmetonyx* with *Tryphosa* he created a homonym which he recognized but did not resolve. The situation continued when the *Tryphosa* concept fell to *Tryphosella* in J.L. Barnard (1969A). To alleviate this problem the new name *Tryphosella schellenbergi* is proposed for the junior homonym *Tmetonyx serratus*.

10. J.L. Barnard (1969A) moved seven species of *Harpinia* Boeck, and *Harpiniopsis* Stephensen to *Pseudharpinia* Schellenberg, however he failed to name them. His implied changes are carried out here for the five species known to occur in the Southern Ocean.

11. In J.L. Barnard (1958B), *Metopoides* Della Valle, and *Proboloides* Della Valle, were considered synonymous and all species in the complex were listed under *Proboloides*. However J.L. Barnard (1969A) re-established *Metopoides* based on the logic of Shoemaker (1955), and this change is implemented here.

12. A number of species in the catalogue have very large synonymical bibliographies due to their taxonomic ages and extensive ranges outside the Southern Ocean. Consequently the synonymical bibliographies for *Ampelisca eschrichtii* Kroyer, *A. macrocephala* Liljeborg, *Corophium bonellii* Milne Edwards, *Jassa falcata* (Montagu), *Leucothoe spinicarpa* (Abildgaard), *Cyphocaris anonyx* Boeck and *Eurythenes gryllus* (Lichtenstein) are not complete, however they are being continually revised as more information becomes available.

13. According to article 1 of the International Code of Zoological Nomenclature (1961), infrasubspecific names are excluded from zoological nomenclature. A name first established with infrasubspecific rank becomes available if the taxon in question is elevated to subspecific rank. In this catalogue all names of infrasubspecific rank, such as forms and varieties, are placed in the syno-

nymical bibliography under the currently accepted species to which they belong. Names originally given subspecific rank are listed separately in the catalogue as long as they still retain their validity.

Zoogeography

Knox and Lowry (in press) analyzed the zoogeography of the benthic gammaridean amphipods of the Southern Ocean. They found that 90% of the species, and 40% of the genera, were endemic. By plotting the affinities of species between localities on a large matrix the Southern Ocean megafaunule was divided into four distinct areas; the Subantarctic, the Magellanic, the Scotia and the East Antarctic. The Subantarctic area, which consists of the Auckland and Campbell Islands, Macquarie Island, Kerguelen and Heard Islands, and the Prince Edward Islands, contains 99 species, 53% of which are endemic. The Lysianassidae and the pontogeneiid part of the Eusiridae dominate the faunule. A pool of circumsubantarctic species ties this loose knit group together and links it to the Magellanic area. The Magellanic area is composed of Tierra del Fuego, the Falkland Islands and the Burdwood Bank, and it contains 121 species of which 53% are endemic. Again the Lysianassidae and the pontogeneiid part of the Eusiridae dominate the faunule. However, other groups have also gained in importance. For instance, a species flock of endemic Acanthonotozomatidae is found here and the Stenothoidae, Corophiidae and Phoxocephalidae are all well represented. Because of the large number of alga-living species which the Magellanic area shares with the Subantarctic area, and because of its good location in the West Wind Drift, Knox and Lowry postulated that the Magellanic area may be a source of much of the Subantarctic amphipod fauna.

The Scotia area, comprising the islands of the Scotia Arc and the western side of the Antarctic Peninsula, contains the richest fauna, and of the 206 species found here 46% are endemic. The Lysianassidae also dominate the fauna here but the Eusiridae become less important as the cold water families Paramphithoidae and Acanthonotozomatidae become better represented. In the East Antarctic area, which includes the continental shelf from the Ross Sea to Enderby Land, 43% of the 162 species present are endemic. The Lysianassidae dominate the fauna and the only other family well represented is the Acanthonotozomatidae. It is thought that the

East Antarctic area may have been a centre of speciation for the Acanthonotozomatidae since the Pleistocene glaciation 3 to 7 million years ago. The Antarctic amphipod megafaunule is considered to be a young group which has evolved in the last 30 million years and very rapidly in the last 10 million years.

ACKNOWLEDGMENTS

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CATALOGUE

ACANTHONOTOZOMATIDAE

ACANTHONOTOZOMELLA ALATA SCHELLENBERG

ACANTHONOTOZOMELLA ALATA SCHELLENBERG, 1926A:332, FIG. 45.
ACANTHONOTOZOMELLA ALATA. J.L.BARNARD, 1958B:17.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

ACANTHONOTOZOMOIDES OATESI (K.H.BARNARD)

ACANTHONOTOZOMELLA OATESI K.H.BARNARD, 1930:346, FIGS. 20,21.
ACANTHONOTOZOMELLA OATESI. K.H.BARNARD, 1932:117, FIG. 65.
ACANTHONOTOZOMELLA OATESI. NICHOLLS, 1938:63.
ACANTHONOTOZOMELLA OATESI. J.L.BARNARD, 1958B:17.
ACANTHONOTOZOMOIDES OATESI. J.L.BARNARD, 1969A:119.
ACANTHONOTOZOMOIDES OATESI. BELLAN-SANTINI, 1972A:167, PL. 1.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 108 M (GEN); GEOLOGIE ARCHIPELAGO, 110-130 M (DBS).
PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
ROSS SEA: CAPE ADARE, 82-92 M (KHB).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 179-235 M; STROMNESS HARBOUR, 155-178 M; 53 51 S 36 21 W, 200-236 M; 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 82-236 M.

ACANTHONOTOZOMOIDES SUBLITORALIS SCHELLENBERG

ACANTHONOTOZOMOIDES SUBLITORALIS SCHELLENBERG, 1931:124, FIGS. 66,67.
ACANTHONOTOZOMOIDES SUBLITORALIS. J.L.BARNARD, 1958B:17.

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).

ANCHIPHIMEDIA DORSALIS K.H.BARNARD

ANCHIPHIMEDIA DORSALIS K.H.BARNARD, 1930:357, FIGS. 29,30.
ANCHIPHIMEDIA DORSALIS. K.H.BARNARD, 1932:123.
ANCHIPHIMEDIA DORSALIS. J.L.BARNARD, 1958B:17.

DISTRIBUTION: PALMER ARCHIPELAGO: NEUMAYER CHANNEL, 259 M (KHB).
ROSS SEA: MCMURDO SOUND, 547 M (KHB).

DEPTH RANGE: 259-547 M.

BATHYPANOPLOEA AUSTRALIS (CHILTON)

ACANTHONOTOZOMA AUSTRALIS CHILTON, 1912:487, PL. 2, FIG. 19.
IPHIMEDIOPSIS AUSTRALIS. SCHELLENBERG, 1931:127, PL. 1, FIG. C, (JUNIOR HOMONYM).
IPHIMEDIOPSIS AUSTRALIS. NICHOLLS, 1938:63, (BY IMPLICATION).
BATHYPANOPLOEA AUSTRALIS. SCHELLENBERG, 1939:137, (BY IMPLICATION).
PSEUDIPHIMEDIOPSIS AUSTRALIS. RUFFO, 1949:18, (BY IMPLICATION).
BATHYPANOPLOEA AUSTRALIS. J.L.BARNARD, 1958B:17.
NOT EPIMERIOPSIS AUSTRALIS. K.H.BARNARD, 1931:428, (=ECLYSIS SIMILIS).

DISTRIBUTION: SOUTHERN OCEAN: ATLANTIC SECTOR, 50 19 S 50 50 W, 2675 M (AS).
WEDDELL SEA: 71 22 S 16 34 W, 2538 M (CC).

DEPTH RANGE: 2538-2675 M.

ECHINIPHIMEDIA ECHINATA (WALKER)

IPHIMEDIA ECHINATA WALKER, 1906C:150.
IPHIMEDIA ECHINATA. WALKER, 1907:28, PL. 10, FIG. 16.
IPHIMEDIA ECHINATA. CHEVREUX, 1912:119.
IPHIMEDIA ECHINATA. CHEVREUX, 1913:119.
ECHINIPHIMEDIA NODOSA. K.H.BARNARD, 1930:361, FIG. 33.
ECHINIPHIMEDIA ECHINATA. K.H.BARNARD. 1932:126.

ECHINIPHIMEDIA ECHINATA. NICHOLLS, 1938:80, FIG. 42.
ECHINIPHIMEDIA ECHINATA. J.L.BARNARD, 1958B:17.
PARIPHIMEDIELLA ECHINATA. J.L.BARNARD, 1964C:51.
ECHINIPHIMEDIA ECHINATA. J.L.BARNARD, 1967C:9, FIGS. 4,5.
ECHINIPHIMEDIA ECHINATA. BELLAN-SANTINI, 1972A:167.
ECHINIPHIMEDIA ECHINATA. THURSTON, 1974B:12.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-650 M (GEN); GEOLOGIE ARCHIPELAGO, 10-130 M (DBS).
BRANSFIELD STRAIT: 63 14 S 58 40 W, 73-92 M; 63 14 S 58 45 W, 45 M (JLB).
DAVIS SEA: 585 M (GEN).
MARGUERITE BAY: JENNY ISLAND, 200-230 M (EC).
PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
ROSS SEA: MCMURDO SOUND, 175-547 M (KHB); WINTER QUARTERS BAY, HUT POINT, 45-54 M (AOW).
SOUTH GEORGIA: STROMNESS HARBOUR, 122-136 M; CAPE SAUNDERS, 132-148 M; CUMBERLAND EAST BAY, 200-234 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, ELEPHANT FLATS, LITTORAL (MHT).

DEPTH RANGE: LITTORAL-650 M.

ECHINIPHIMEDIA HODGSONI (WALKER)

IPHIMEDIA HODGSONI WALKER, 1906C:152.
IPHIMEDIA HODGSONI. WALKER, 1907:30, PL. 11, FIG. 18.
ECHINIPHIMEDIA HODGSONI. K.H.BARNARD, 1930:359, FIG. 31.
ECHINIPHIMEDIA HODGSONI. SCHELLENBERG, 1931:123.
ECHINIPHIMEDIA HODGSONI. K.H.BARNARD, 1932:125.
ECHINIPHIMEDIA HODGSONI. NICHOLLS, 1938:82, FIGS. 43,44.
ECHINIPHIMEDIA HODGSONI. J.L.BARNARD, 1958B:17.
ECHINIPHIMEDIA HODGSONI. J.L.BARNARD, 1967C:3, FIGS. 1-3.
ECHINIPHIMEDIA HODGSONI. BELLAN-SANTINI, 1972A:169.

DISTRIBUTION: ADELAIDE ISLAND: 67 49 S 69 10 W, 119 M (JLB).
ADELIE COAST: COMMONWEALTH BAY, 81-720 M (GEN); GEOLOGIE ARCHIPELAGO, 20-140 M (DBS).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB); 62 41 S 57 51 W, 662-1120 M (JLB).
DAVIS SEA: 198-601 M (GEN).
OATES COAST: 329-366 M (KHB).
PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
ROSS SEA: COULMAN ISLAND, 180 M (AOW); MCMURDO SOUND, 348-547 M (KHB).
SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M (AS); CUMBERLAND EAST BAY, 60-234 M; STROMNESS HARBOUR, 122-136 M; CAPE SAUNDERS, 132-148 M; 53 48 S 35 57 W, 401-411 M (KHB).
SOUTH ORKNEY ISLANDS: 60 26 S 45 53 W, 146-168 M (JLB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB); ELEPHANT ISLAND, 61 25 S 56 30 W, 210-300 M (JLB).

DEPTH RANGE: 20-1120 M.

ECHINIPHIMEDIA SCOTTI K.H.BARNARD

ECHINIPHIMEDIA SCOTTI K.H.BARNARD, 1930:360, FIG. 32.
ECHINIPHIMEDIA SCOTTI. J.L.BARNARD, 1958B:17.
ECHINIPHIMEDIA SCOTTI. J.L.BARNARD, 1967C:13, FIG. 6.
ECHINIPHIMEDIA SCOTTI. BELLAN-SANTINI, 1972A:169.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 50-130 M (DBS).
ROSS SEA: MCMURDO SOUND, 348-457 M (KHB).
TRINITY PENINSULA: JOINVILLE ISLAND, 62 40 S 54 45 W, 210-219 M (JLB).

DEPTH RANGE: 50-457 M.

GNATHIPHIMEDIA BARNARDI THURSTON

GNATHIPHIMEDIA BARNARDI THURSTON, 1974B:15, FIGS. 3,4.
GNATHIPHIMEDIA MANDIBULARIS. K.H.BARNARD, 1932:121.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 230-250 M; CUMBERLAND EAST BAY, 60-110 M; CUMBERLAND WEST BAY, 110 M; STROMNESS HARBOUR, 26-178 M; CAPE SAUNDERS, 132-148 M; 53 52 S 36 08 W, 160 M; 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 26-250 M.

GNATHIPHIMEDIA FUCHSI THURSTON

GNATHIPHIMEDIA FUCHSI THURSTON, 1974A:29, FIGS. 8K-M,9A-I,10A-G.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-15 M (MHT).

GNATHIPHIMEDIA INCERTA BELLAN-SANTINI

GNATHIPHIMEDIA INCERTA BELLAN-SANTINI, 1972A:170, PLS. 2,3.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 60-75 M (DBS).

GNATHIPHIMEDIA MACROPS K.H.BARNARD

GNATHIPHIMEDIA MACROPS K.H.BARNARD, 1932:122, FIG. 68.
GNATHIPHIMEDIA SEXDENTATA. K.H.BARNARD, 1932:122, (IN PART).
GNATHIPHIMEDIA MACROPS. NICHOLLS, 1938:78, FIG. 41.
GNATHIPHIMEDIA MACROPS. J.L.BARNARD, 1958B:17.
GNATHIPHIMEDIA MACROPS. THURSTON, 1974B:13, FIG. 2B.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
SOUTH GEORGIA: CUMBERLAND BAY, 120-250 M; CAPE SAUNDERS, 132-148 M;
CUMBERLAND EAST BAY, 200-234 M; 53 51 S 36 21 W, 200-236 M (KHB).

DEPTH RANGE: 120-540 M.

GNATHIPHIMEDIA MANDIBULARIS K.H.BARNARD

GNATHIPHIMEDIA MANDIBULARIS K.H.BARNARD, 1930:352, FIG. 26.
GNATHIPHIMEDIA MANDIBULARIS. NICHOLLS, 1938:77.
GNATHIPHIMEDIA MANDIBULARIS. J.L.BARNARD, 1958B:17.
NOT GNATHIPHIMEDIA MANDIBULARIS. K.H.BARNARD, 1932:121, (=GNATHIPHIMEDIA BARNARDI).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 630-720 M (GEN).
OATES COAST: 329-366 M (KHB).
ROSS SEA: MCMURDO SOUND, 348-547 M (KHB).

DEPTH RANGE: 329-720 M.

GNATHIPHIMEDIA SEXDENTATA (SCHELLENBERG)

IPHIMEDIELLA SEXDENTATA SCHELLENBERG, 1926A:331.
IPHIMEDIA PACIFICA. WALKER, 1907:27, (IN PART, PART =IPHIMEDIELLA MARGUERITEI).
IPHIMEDIA PACIFICA. CHEVREUX, 1913:118.
GNATHIPHIMEDIA PACIFICA. K.H.BARNARD, 1930:353,449, FIG. 27.
GNATHIPHIMEDIA SEXDENTATA. K.H.BARNARD, 1932:122, (IN PART, PART =GNATHIPHIMEDIA MACROPS).
GNATHIPHIMEDIA SEXDENTATA. NICHOLLS, 1938:77, FIG. 40.
GNATHIPHIMEDIA SEXDENTATA. STEPHENSEN, 1947:50.
GNATHIPHIMEDIA SEXDENTATA. J.L.BARNARD, 1958B:17.
GNATHIPHIMEDIA SEXDENTATA. THURSTON, 1974B:13, FIG. 2A.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-720 M (GEN).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 216 M (GEN); 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: 200 M (EC); STONINGTON ISLAND, 31 M (MHT).
PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-315 M (KHB); PORT LOCKROY, 9-120 M (KS).
ROSS SEA: MCMURDO SOUND, 256-547 M, CAPE ROYDS, 108-144 M (KHB), WINTER QUARTERS BAY, 36-234 M (AOW).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, 50-80 M (EC).

DEPTH RANGE: 9-720 M.

IPHIMEDIA PACIFICA STEBBING

IPHIMEDIA PACIFICA STEBBING, 1883:207.
IPHIMEDIA PACIFICA. STEBBING, 1888:890, PL. 71.
IPHIMEDIA PACIFICA. DELLA VALLE, 1893:583, PL. 58, FIG. 89.

IPHIMEDIA PACIFICA. STEBBING, 1906:215, FIG. 55.
IPHIMEDIELLA PACIFICA. K.H.BARNARD, 1932:119.
IPHIMEDIA PACIFICA. J.L.BARNARD, 1958B:17.

DISTRIBUTION: HEARD ISLAND: 52 04 S 71 22 E, 270-273 M (TRRS).
KERGUELEN ISLANDS: CUMBERLAND BAY, 229-416 M (TRRS).
ROSS SEA: WINTER QUARTERS BAY, 36-234 M (AOW).

DEPTH RANGE: 36-416 M.

IPHIMEDIELLA BRANSFIELDI K.H.BARNARD

IPHIMEDIELLA BRANSFIELDI K.H.BARNARD, 1932:119.
IPHIMEDIELLA BRANSFIELDI. NICHOLLS, 1938:70, FIG. 37J.
IPHIMEDIELLA BRANSFIELDI. J.L.BARNARD, 1958B:18.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 216 M (GEN).

DEPTH RANGE: 200-216 M.

IPHIMEDIELLA CYCLOGENA K.H.BARNARD

IPHIMEDIELLA CYCLOGENA K.H.BARNARD, 1930:349, FIG. 23.
IPHIMEDIELLA CYCLOGENA. J.L.BARNARD, 1958B:18.

DISTRIBUTION: OATES COAST: 329-366 M (KHB).
ROSS SEA: MCMURDO SOUND, 348-457 M (KHB).

DEPTH RANGE: 329-457 M.

IPHIMEDIELLA MARGUERITEI CHEVREUX

IPHIMEDIELLA MARGUERITEI CHEVREUX, 1912:213.
IPHIMEDIA PACIFICA. WALKER, 1907:27, (IN PART).
IPHIMEDIELLA MARGUERITEI. CHEVREUX, 1913:120, FIGS. 22-24.
IPHIMEDIELLA MARGUERITEI. K.H.BARNARD, 1930:348, FIG. 22.
IPHIMEDIELLA MARGUERITEI. SCHELLENBERG, 1931:119.
IPHIMEDIELLA MARGUERITEI. K.H.BARNARD, 1932:119.
IPHIMEDIELLA MARGUERITEI. NICHOLLS, 1938:69.
IPHIMEDIELLA MARGUERITEI VAR. ACUTA NICHOLLS, 1938:69, FIG. 36.
IPHIMEDIELLA MARGUERITEI. STEPHENSEN, 1947:49.
IPHIMEDIELLA MARGUERITEI. J.L.BARNARD, 1958B:18.
IPHIMEDIELLA MARGUERITEI. BELLAN-SANTINI, 1972A:173.
IPHIMEDIELLA MARGUERITEI. THURSTON, 1974B:13.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 282-720 M (GEN); CAPE GEODESIE, 220-240 M (DBS).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
MARGUERITE BAY: 200 M (EC).
ROSS SEA: MCMURDO SOUND, 256-457 M (KHB).
SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS), 120-204 M (KHB); CUMBERLAND EAST BAY, 60-110 M (KHB).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 10-15 M (KS).

DEPTH RANGE: 10-720 M.

IPHIMEDIELLA RIGIDA K.H.BARNARD

IPHIMEDIELLA RIGIDA K.H.BARNARD, 1930:351, FIG. 25.
IPHIMEDIELLA RIGIDA. J.L.BARNARD, 1958B:18.

DISTRIBUTION: ROSS SEA: MCMURDO SOUND, 256 M (KHB).

LABRIPHIMEDIA PULCHRIDENTATA (STEBBING)

IPHIMEDIA PULCHRIDENTATA STEBBING, 1883:206.
IPHIMEDIA PULCHRIDENTATA. STEBBING, 1888:894, PL. 72.
IPHIMEDIA PULCHRIDENTATA. DELLA VALLE, 1893:583, PL. 58, FIG. 88.

IPHIMEDIA PULCHRIDENTATA. STEBBING, 1906:215.
ECHINIPHIMEDIA PULCHRIDENTATA. K.H.BARNARD, 1930:358.
LABRIPHIMEDIA PULCHRIDENTATA. K.H.BARNARD, 1932:123.
LABRIPHIMEDIA PULCHRIDENTATA. J.L.BARNARD, 1958B:18.

DISTRIBUTION: HEARD ISLAND: 52 59 S 73 33 E, 136 M (TRRS).

LABRIPHIMEDIA VESPUCCII K.H.BARNARD

LABRIPHIMEDIA VESPUCCII K.H.BARNARD, 1931A:427.
LABRIPHIMEDIA VESPUCCII. K.H.BARNARD, 1932:124, FIG. 69.
LABRIPHIMEDIA VESPUCCII. J.L.BARNARD, 1958B:18.

DISTRIBUTION: FALKLAND ISLANDS: EDDYSTONE ROCK, 105-115 M (KHB).

MAXILLIPHIMEDIA LONGIPES (WALKER)

IPHIMEDIA LONGIPES WALKER, 1906C:151.
IPHIMEDIA LONGIPES. WALKER, 1907:29, PL. 9, FIG. 17.
MAXILLIPHIMEDIA LONGIPES. K.H.BARNARD, 1930:355, FIG. 28.
MAXILLIPHIMEDIA LONGIPES. J.L.BARNARD, 1958B:18.
MAXILLIPHIMEDIA LONGIPES. DEARBORN, 1967:45.

DISTRIBUTION: ROSS SEA: COULMAN ISLAND, 180 M (AOW); MCMURDO SOUND, 379 M (KHB), 100 M (JHD).

DEPTH RANGE: 100-379 M.

NODOTERGUM BICARINATUM BELLAN-SANTINI

NODOTERGUM BICARINATUM BELLAN-SANTINI, 1972A:173, PL. 4.

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 115-135 M (DBS).

PANOPLOEA JOUBINI CHEVREUX

PANOPLOEA JOUBINI CHEVREUX, 1912:212.
PANOPLOEA JOUBINI. CHEVREUX, 1913:114, FIGS. 19-21.
PANOPLOEA JOUBINI. K.H.BARNARD, 1932:128.
PANOPLOEA JOUBINI VAR. BIDENTATA NICHOLLS, 1938:64, FIG. 33.
PANOPLOEA JOUBINI. STEPHENSEN, 1947:50.
PANOPLOEA JOUBINI VAR. BIDENTATA. HURLEY, 1954D:766, (KEY).
PANOPLOEA JOUBINI VAR. JOUBINI. HURLEY, 1954D:766, (KEY).
PANOPLOEA JOUBINI. J.L.BARNARD, 1958B:18.
PANOPLOEA JOUBINI. BELLAN-SANTINI, 1972A:175, PL. 5.

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 115-170 M; GEOLOGIE ARCHIPELAGO, 82-96 M (DBS); COMMONWEALTH BAY, 45-540 M (GEN).
DAVIS SEA: 216 M (GEN).
MARGUERITE BAY: JENNY ISLAND, 250 M (EC).
PALMER ARCHIPELAGO: PORT LOCKROY, 120 M (KS).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 45-540 M.

PANOPLOEA MACROCYSTIDIS K.H.BARNARD

PANOPLOEA MACROCYSTIDIS K.H.BARNARD, 1932:128, FIG. 72.
PANOPLOEA MACROCYSTIDIS. HURLEY, 1954D:766, (KEY).
PANOPLOEA MACROCYSTIDIS. J.L.BARNARD, 1958B:18.

DISTRIBUTION: FALKLAND ISLANDS: PORT STANLEY, 0-2 M (KHB).

PANOPLOEA MULTIDENTATA SCHELLENBERG

PANOPLOEA MULTIDENTATA SCHELLENBERG, 1931:117, FIG. 63.
PANOPLOEA MULTIDENTATA. J.L.BARNARD, 1958B:18.

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 140-150 M; 52 S 59 W, 90 M (AS).
MAGELLANIC AREA: ELIZABETH ISLAND; RIO SECO, 18-36 M (AS); HARRIS BAY, 27 M; PICTON ISLAND, BANNER COVE, 5 M; MAGELLAN SOUND (AS).

DEPTH RANGE: 5-197 M.

PANOPLOEA SPINOSA THOMSON

PANOPLOEA SPINOSA THOMSON, 1880A:3, PL. 1, FIG. 2.
PANOPLAEA SPINOSA. THOMSON, 1880B:213.
PANOPLOEA SPINOSA. THOMSON AND CHILTON, 1886:150.
IPHIMEDIA SPINOSA. STEBBING, 1888:524.
PANOPLOEA SPINOSA. THOMSON, 1889:262.
IPHIMEDIA SPINOSA. DELLA VALLE, 1893:585.
IPHIMEDIA SPINOSA. HUTTON, 1904:259.
PANOPLOEA SPINOSA. STEBBING, 1906:212.
PANOPLOEA SPINOSA. THOMSON, 1913:242.
PANOPLOEA SPINOSA. STEPHENSEN, 1927:313, FIG. 9.
PANOPLOEA SPINOSA. HURLEY, 1954D:766, FIGS. 1-35, (KEY).
PANOPLOEA SPINOSA. J.L.BARNARD, 1958B:18.
PANOPLOEA SPINOSA. J.L.BARNARD, 1972C:25,31, (KEY).
PANOPLOEA SPINOSA. LOWRY, 1974:101,122, FIG. 3A, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

PARACANTHONOTOZOMA TRISPINOSUM BELLAN-SANTINI

PARACANTHONOTOZOMA TRISPINOSUM BELLAN-SANTINI, 1972A:177, PL. 6.

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 120-130 M (DBS).

PARANCHIPHIMEDIA MONODI RUFFO

PARANCHIPHIMEDIA MONODI RUFFO, 1949:20, FIGS. 3,4.
PARANCHIPHIMEDIA MONODI. J.L.BARNARD, 1958B:18.

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 00 S 80 48 W (SR).

PARAPANOPLOEA LONGIROSTRIS BELLAN-SANTINI

PARAPANOPLOEA LONGIROSTRIS BELLAN-SANTINI, 1972A:179, PLS. 7,8.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 110-130 M (DBS).

PARAPANOPLOEA OXYGNATHIA NICHOLLS

PARAPANOPLOEA OXYGNATHIA NICHOLLS, 1938:66, FIGS. 34,35.
PARAPANOPLOEA OXYGNATHIA. J.L.BARNARD, 1958B:18.

DISTRIBUTION: DAVIS SEA: 216 M (GEN).

PARIPHIMEDIA INTEGRICAUDA CHEVREUX

PARIPHIMEDIA INTEGRICAUDA CHEVREUX, 1906A:39, FIG. 2.
PARIPHIMEDIA INTEGRICAUDA. CHEVREUX, 1906E:39, FIGS. 21-23.
PARIPHIMEDIA INTEGRICAUDA. CHILTON, 1912:487.
PARIPHIMEDIA INTEGRICAUDA. CHILTON, 1925A:176.
PARIPHIMEDIA INTEGRICAUDA. K.H.BARNARD, 1932:127, FIG. 70.
PARIPHIMEDIA INTEGRICAUDA. STEPHENSEN, 1947:50.
PARIPHIMEDIA INTEGRICAUDA. J.L.BARNARD, 1958B:19.
PARAPHIMEDIA INTEGRICAUDA. CASTELLANOS AND PEREZ, 1963:TABLE 5, FIG. 17C.
PARIPHIMEDIA INTEGRICAUDA. THURSTON, 1974A:29.
PARIPHIMEDIA INTEGRICAUDA. THURSTON, 1974B:16.

DISTRIBUTION: DANCO COAST: SPRING POINT, TIDE POOL (C&P).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, MELCHIOR ISLANDS, 4-10 M (KHB); FLANDRES BAY, LOW TIDE-10 M; PORT LOCKROY, 20-30 M (KS), LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).

SOUTH ORKNEY ISLANDS: SCOTIA BAY, LOW TIDE-7 M (CC); SIGNY ISLAND, BORGE BAY, 1.5-49 M (MHT).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 55-91 M (KS).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT), 25-75 M (KS).
TRINITY PENINSULA: HOPE BAY, GRUNDEN ROCK, LITTORAL (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND, LOW TIDE (EC).

DEPTH RANGE: LITTORAL-91 M.

PARIPHIMEDIA NORMANI (CUNNINGHAM)

IPHIMEDIA NORMANI CUNNINGHAM, 1871:498, PL. 59, FIG. 7.
IPHIMEDIA NORMANI. DELLA VALLE, 1893:585.
IPHIMEDIA NORMANI. STEBBING, 1906:217.
PARIPHIMEDIA NORMANI. STEBBING, 1914:359, PLS. 4,5.
PARIPHIMEDIA NORMANI. SCHELLENBERG, 1931:119.
PARIPHIMEDIA NORMANI. K.H.BARNARD, 1932:127, FIG. 71.
PARIPHIMEDIA NORMANI. J.L.BARNARD, 1958B:19.

DISTRIBUTION: FALKLAND ISLANDS: BERKELEY SOUND, 16 M (AS); PORT STANLEY, 0-2 M (KHB); WHALES BAY (TRRS).
MAGELLANIC AREA: ELIZABETH ISLAND (ROC); MAGELLAN SOUND; PUERTO HOPE, 11-18 M; USHUAIA BAY, 22-27 M (AS).

DEPTH RANGE: 0-27 M.

PARIPHIMEDIELLA GLABRA SCHELLENBERG

PARIPHIMEDIELLA GLABRA SCHELLENBERG, 1931:121, FIG. 65, PL. 1, FIG. B.
PARIPHIMEDIELLA GLABRA. J.L.BARNARD, 1958B:19.

DISTRIBUTION: BURDWOOD BANK: 53 45 S 61 10 W, 140-150 M (AS).
FALKLAND ISLANDS: BERKELEY SOUND, 16 M; PORT ALBEMARLE, 15-30 M; 52 29 S 60 36 W, 197 M; PORT STANLEY, 2 M (AS).
MAGELLANIC AREA: RIO SECO, 18-36 M; CAPE VALENTINA, 270 M; USHUAIA BAY, 19-27 M; ULTIMA ESPERANZA, 12-18 M; MAGELLAN SOUND; PUNTA ARENAS (AS).

DEPTH RANGE: 2-270 M.

PARIPHIMEDIELLA IMPARIDENTATA BELLAN-SANTINI

? PARIPHIMEDIELLA IMPARIDENTATA BELLAN-SANTINI, 1972A:181, PL. 9.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 50 M (DBS).

PARIPHIMEDIELLA INTERMEDIA (NICHOLLS)

IPHIMEDIELLA INTERMEDIA NICHOLLS, 1938:71, FIGS. 37A-H.
IPHIMEDIELLA INTERMEDIA. J.L.BARNARD, 1958B:18.
PARIPHIMEDIELLA INTERMEDIA. J.L.BARNARD, 1964C:51.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 513-540 M (GEN).

PARIPHIMEDIELLA MICRODENTATA (SCHELLENBERG)

IPHIMEDIA MICRODENTATA SCHELLENBERG, 1926A:329, FIG. 44.
IPHIMEDIELLA BREVISPINOSA K.H.BARNARD, 1930:351, FIG. 24.
PARIPHIMEDIELLA MICRODENTATA. SCHELLENBERG, 1931:121.
IPHIMEDIELLA MICRODENTATA. K.H.BARNARD, 1932:116.
PARIPHIMEDIELLA MICRODENTATA. NICHOLLS, 1938:73, FIG. 38.
PARIPHIMEDIELLA MICRODENTATA. J.L.BARNARD, 1958B:19.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 590-720 M (GEN).
DAVIS SEA: 216 M (GEN); 'GAUSS STATION', 385 M (AS).
ROSS SEA: MCMURDO SOUND, 256-441 M (KHB).

DEPTH RANGE: 216-720 M.

PARIPHIMEDIELLA OCTODENTATA NICHOLLS

PARIPHIMEDIELLA OCTODENTATA NICHOLLS, 1938:75, FIG. 39.
PARIPHIMEDIELLA OCTODENTATA. J.L.BARNARD, 1958B:19.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 513-540 M (GEN).

PARIPHIMEDIELLA SERRATA (SCHELLENBERG)

IPHIMEDIA SERRATA SCHELLENBERG, 1926A:328, FIG. 43.
PARIPHIMEDIELLA SERRATA. SCHELLENBERG, 1931:121.
PARIPHIMEDIELLA SERRATA. J.L.BARNARD, 1958B:19.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

PSEUDIPHIMEDIELLA NODOSA (DANA)

IPHIMEDIA (ACANTHOSOMA) NODOSA DANA, 1852:217.
IPHIMEDIA NODOSA. DANA, 1853-55:928, PL. 63, FIGS. 3A,B.
IPHIMEDIA NODOSA. BATE, 1862:125, PL. 23, FIG. 1.
IPHIMEDIA NODOSA. DELLA VALLE, 1893:583, PL. 58, FIGS. 90,91.
IPHIMEDIA NODOSA. STEBBING, 1906:216.
IPHIMEDIA NODOSA. CHEVREUX, 1913:118.
IPHIMEDIA NODOSUS. STEBBING, 1914:358.
PSEUDIPHIMEDIELLA NODOSA. SCHELLENBERG, 1931:119, FIG. 64, PL. 1, FIG. A.
IPHIMEDIELLA NODOSA. K.H.BARNARD, 1932:119, FIG. 67.
PSEUDIPHIMEDIELLA NODOSA. J.L.BARNARD, 1958B:19.
NOT ECHINIPHIMEDIA NODOSA. K.H.BARNARD, 1930:361, FIG. 33, (=ECHINIPHIMEDIA ECHINATA).

DISTRIBUTION: FALKLAND ISLANDS: PORT STANLEY, LOW TIDE (TRRS); PORT ALBEMARLE, 40 M; PORT LOUIS, 7 M; PORT STANLEY (AS); EAST FALKLAND ISLAND, 79 M (KHB).
MAGELLANIC AREA: MAGELLAN SOUND; SMYTH CHANNEL; PUNTA ARENAS, 23 M; BAHIA INUTIL, 36-54 M; PORVENIR, 11-18 M; 51 40 S 57 25 W, 150 M (AS); HERMITE ISLAND (JDD); DESOLACION ISLA, BAHIA TUESDAY (EC).

DEPTH RANGE: LOW TIDE-150 M.

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AMPELISCIDAE

AMPELISCA BARNARDI NICHOLLS

AMPELISCA BARNARDI NICHOLLS, 1938:44, FIG. 23.
AMPELISCA BARNARDI. RUFFO, 1949:12.
AMPELISCA BARNARDI. DAHL, 1954:286, FIGS. 14-21.
AMPELISCA BARNARDI. J.L.BARNARD, 1958B:19.
AMPELISCA BARNARDI. J.L.BARNARD, 1960A:12,20, (KEY).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
BELLINGSHAUSEN SEA: 71 19 S 87 37 W (SR).
DAVIS SEA: 198 M (GEN).
ROSS SEA: 'DISCOVERY INLET', 550-640 M (ED).

DEPTH RANGE: 198-640 M.

AMPELISCA BOUVIERI CHEVREUX

AMPELISCA BOUVIERI CHEVREUX, 1912:210.
AMPELISCA BOUVIERI. CHEVREUX, 1913:96, FIGS. 7-9.
AMPELISCA BOUVIERI. SCHELLENBERG, 1931:55.
AMPELISCA BOUVIERI. K.H.BARNARD, 1932:82.
AMPELISCA BOUVIERI. J.L.BARNARD, 1958B:20.
AMPELISCA BOUVIERI. J.L.BARNARD, 1960A:12,21, (KEY).
AMPELISCA BOUVIERI. THURSTON, 1974B:17.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, NEUMAYER CHANNEL, 60-70 M (EC), LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M; 54 23 S 36 26 W, 64-74 M (AS);

CUMBERLAND WEST BAY, 110 M; STROMNESS HARBOUR, 122-136 M; 54 08 S 36 27 W, 106 M (KHB).
TRINITY PENINSULA: JAMES ROSS ISLAND, 64 36 S 57 42 W, 125 M (AS); HOPE BAY, 37-55 M (MHT).

DEPTH RANGE: 18-136 M.

AMPELISCA BRANSFIELDI K.H.BARNARD

AMPELISCA BRANSFIELDI K.H.BARNARD, 1932:83.
AMPELISCA ? BRANSFIELDI. STEPHENSEN, 1947:36, FIG. 11.
AMPELISCA BRANSFIELDI. J.L.BARNARD, 1958B:20.
AMPELISCA BRANSFIELDI. J.L.BARNARD, 1960A:12,19, (KEY).

DISTRIBUTION: SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 1080 M (KHB); BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 750-1080 M.

AMPELISCA ESCHRICHTII KROYER

AMPELISCA ESCHRICHTII KROYER, 1842:155.
PSEUDOPHTHALMUS PELAGICUS STIMPSON, 1853:57.
AMPELISCA INGENS BATE, 1862:92, PL. 15, FIG. 2.
AMPELISCA PELAGICA. BATE, 1862:94.
AMPELISCA ESCHRICHTI. BOECK, 1870:144.
AMPELISCA DUBIA BOECK, 1870:144.
AMPELISCA PROPINQUA BOECK, 1870:145.
AMPELISCA DUBIA. BOECK, 1876:527.
AMPELISCA ESCHRICHTI. BOECK, 1876:528, PL. 31, FIG. 7.
AMPELISCA PROPINQUA. BOECK, 1876:533, PL. 31, FIG. 8.
AMPELISCA ESCHRICHTII. SCHNEIDER, 1884:120.
AMPELISCA ESCHRICHTII. DELLA VALLE, 1893:475, PL. 57, FIG. 42, (IN PART, PART =AMPELISCA MACROCEPHALA).
AMPELISCA ESCHRICHTII. STEBBING, 1894:17.
AMPELISCA ESCHRICHTII. OHLIN, 1895:30, (IN PART, PART =AMPELISCA MACROCEPHALA).
AMPELISCA ESCHRICHTII. SARS, 1895:174, PL. 61, FIG. 1.
AMPELISCA DUBIA. SARS, 1895:175.
AMPELISCA INGENS. SARS, 1895:175.
AMPELISCA PROPINQUA. SARS, 1895:175.
AMPELISCA ESCHRICHTII. WHITEAVES, 1901:222.
AMPELISCA ESCHRICHTI. HOLMES, 1905:525.
AMPELISCA ESCHRICHTI. CHEVREUX, 1906E:20, FIG. 11.
AMPELISCA ESCHRICHTII. STEBBING, 1906:100,721,722.
AMPELISCA ESCHRICHTI. BRUGGEN, 1909:16.
AMPELISCA ESCHRICHTI. STAPPERS, 1911:19,23, FIGS. 9,14-16.
AMPELISCA ESCHRICHTI. CHEVREUX, 1913:96.
AMPELISCA ESCHRICHTII. CHILTON, 1917:87, FIGS. 5,7, (IN PART, NOT FIGS. 1-4,6).
AMPELISCA ESCHRICHTII. CHILTON, 1920:6.
AMPELISCA ESCHRICHTII. SHOEMAKER, 1920:9E,27E.
AMPELISCA ESCHRICHTI. SCHELLENBERG, 1925A:201.
AMPELISCA ESCHRICHTI. SCHELLENBERG, 1925B:128.
AMPELISCA ESCHRICHTII. STEPHENSEN, 1925:138.
AMPELISCA ESCHRICHTII. SHOEMAKER, 1930:245.
AMPELISCA ESCHRICHTII. SHOEMAKER, 1931:9.
AMPELISCA ESCHRICHTII. K.H.BARNARD, 1932:81, FIG. 37A.
AMPELISCA ESCHRICHTI. STEPHENSEN, 1933:23,69, MAP FIG. 9.
AMPELISCA ESCHRICHTI. STEPHENSEN, 1935:121.
AMPELISCA ESCHRICHTI. GURJANOVA, 1951:307, FIG. 170.
AMPELISCA ? ESCHRICHTI. DAHL, 1954:285.
AMPELISCA ESCHRICHTI. DUNBAR, 1954:720.
AMPELISCA ESCHRICHTII. SHOEMAKER, 1955:9.
AMPELISCA ESCHRICHTI. J.L.BARNARD, 1958B:20.
AMPELISCA ESCHRICHTI. J.L.BARNARD, 1960A:12,19,23, (KEY).
AMPELISCA ESCHRICHTI. MILLS, 1963:987, (KEY).
AMPELISCA ESCHRICHTI. MILLS, 1965:122.
AMPELISCA ESCHRICHTII. J.L.BARNARD, 1967A:5, FIG. 10.
AMPELISCA ESCHRICHTI. MILLS, 1967:642.
AMPELISCA ESCHRICHTI. J.L.BARNARD, 1971A:1, FIGS. 1,2, TABLE 1.
AMPELISCA ESCHRICHTI. BELLAN-SANTINI, 1972A:183.
AMPELISCA ESCHRICHTI. BOUSFIELD, 1973:133, (KEY).
AMPELISCA ESCHRICHTI. SANDERSON, 1973:2.
AMPELISCA ESCHRICHTII. THURSTON, 1974B:17.
NOT AMPELISCA ESCHRICHTI. BUCHHOLZ, 1874:375, (=AMPELISCA MACROCEPHALA).

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 170-180 M (DBS).
MARGUERITE BAY: 200 M (EC).
PALMER ARCHIPELAGO: ANVERS ISLAND, BISCOE BAY, 110 M; PORT LOCKROY, 60-70 M (EC); SCHOLLAERT CHANNEL, GAND ISLAND, 160 M; NEUMAYER CHANNEL, 259 M (KHB).
ROSS SEA: 'DISCOVERY INLET', 550 M (ED).
SOUTH GEORGIA: CUMBERLAND BAY, 120-204 M; STROMNESS HARBOUR, 155-178 M (KHB).

DEPTH RANGE: 55-550 M.

EXTRINSIC DISTRIBUTION: NORTH ATLANTIC OCEAN; NORTH POLAR SEA.

AMPELISCA HEMICRYPTOPS K.H.BARNARD

AMPELISCA HEMICRYPTOPS K.H.BARNARD, 1930:329, FIG. 8.
AMPELISCA HEMICRYPTOPS. K.H.BARNARD, 1932:83, FIG. 37B.
AMPELISCA HEMICRYPTOPS. J.L.BARNARD, 1958B:20.
AMPELISCA HEMICRYPTOPS. J.L.BARNARD, 1960A:12,20, (KEY).
AMPELISCA HEMICRYPTOPS. J.L.BARNARD, 1966A:55.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
OATES COAST: 329-366 M (KHB).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-335 M; ANVERS ISLAND, FOURNIER BAY, 295 M; NEUMAYER CHANNEL, 259 M; BISMARCK STRAIT, 90-130 M (KHB).
ROSS SEA: MCMURDO SOUND, 256-441 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 90-441 M.

AMPELISCA MACROCEPHALA LILJEBORG

AMPELISCA MACROCEPHALA LILJEBORG, 1853:7.
AMPELISCA MACROCEPHALA. LILJEBORG, 1856:137.
AMPELISCA MACROCEPHALA. BRUZELIUS, 1859:85.
AMPELISCA MACROCEPHALA. BATE, 1862:94.
AMPELISCA MACROCEPHALA. NORMAN, 1869:278.
AMPELISCA MACROCEPHALA. BOECK, 1870:145.
AMPELISCA ESCHRICHTI. BUCHHOLZ, 1874:375.
AMPELISCA MACROCEPHALA. METZGER, 1875:298.
AMPELISCA MACROCEPHALA. BOECK, 1876:531, PL. 30, FIG. 8.
AMPELISCA MACROCEPHALA. SMITH, 1883:222.
AMPELISCA MACROCEPHALA. SCHNEIDER, 1884:122.
AMPELISCA ESCHRICHTII. DELLA VALLE, 1893:475, (IN PART).
AMPELISCA MACROCEPHALA. STEBBING, 1894:17.
AMPELISCA ESCHRICHTII. OHLIN, 1895:30, (IN PART).
AMPELISCA MACROCEPHALA. SARS, 1895:172, PL. 60, FIG. 1.
AMPELISCA MACROCEPHALA. WALKER, 1898:167.
AMPELISCA MACROCEPHALA. WHITEAVES, 1901:222.
AMPELISCA MACROCEPHALA. HOLMES, 1903:273, (IN PART).
AMPELISCA MACROCEPHALA. WALKER, 1903A:53, PL. 9, FIGS. 58-61*.
AMPELISCA MACROCEPHALA. HOLMES, 1905:479, (FIG. =AMPELISCA VERRILLI).
AMPELISCA MACROCEPHALA. REIBISCH, 1905:169.
AMPELISCA MACROCEPHALA. STEBBING, 1906:101.
AMPELISCA MACROCEPHALA. WALKER, 1907:18.
AMPELISCA MACROCEPHALA. HOLMES, 1908:510, FIG. 19.
AMPELISCA MACROCEPHALA. STEPHENSEN, 1912B:531.
AMPELISCA MACROCEPHALUS. STEBBING, 1914:357.
AMPELISCA ESCHRICHTII. CHILTON, 1917:87, FIG. 6, (IN PART, FIG. 6 LABELED AMPELISCA MACROCEPHALA).
AMPELISCA MACROCEPHALA. KUNKEL, 1918:62, FIG. 8, (IN PART).
AMPELISCA MACROCEPHALA. SCHELLENBERG, 1925B:128.
AMPELISCA MACROCEPHALA. STEPHENSEN, 1925:141.
AMPELISCA LATIPES STEPHENSEN, 1925:142, FIG. 42.
AMPELISCA MACROCEPHALA. SHOEMAKER, 1930:246.
AMPELISCA MACROCEPHALA F. GRACILICAUDA SCHELLENBERG, 1931:52, FIG. 27.
AMPELISCA MACROCEPHALA F. DENTIFERA SCHELLENBERG, 1931:53, FIG. 28.
AMPELISCA MACROCEPHALA. SHOEMAKER, 1931:8.
AMPELISCA MACROCEPHALA. K.H.BARNARD, 1932:82, FIG. 38.
AMPELISCA MACROCEPHALA. STEPHENSEN, 1933:24,69, MAP FIG. 10.
AMPELISCA MACROCEPHALA F. GRACILICAUDA. SCHELLENBERG, 1935:232.
AMPELISCA MACROCEPHALA. STEPHENSEN, 1935:123.
AMPELISCA MACROCEPHALA. NICHOLLS, 1938:43.
AMPELISCA MACROCEPHALA. DAHL, 1946:6.
AMPELISCA MACROCEPHALA. GURJANOVA, 1951:308, FIG. 171.
AMPELISCA MACROCEPHALA. J.L.BARNARD, 1954A:41, PL. 29.
AMPELISCA MACROCEPHALA. DUNBAR, 1954:721.
AMPELISCA MACROCEPHALA. SHOEMAKER, 1955:9.

AMPELISCA MACROCEPHALA. J.L.BARNARD, 1958B:21.
AMPELISCA MACROCEPHALA. J.L.BARNARD, 1960A:12,21,23,28, (KEY).
AMPELISCA MACROCEPHALA. MILLS, 1963:985, (IN PART), 987, (KEY).
AMPELISCA MACROCEPHALA. J.L.BARNARD, 1964D:214.
AMPELISCA MACROCEPHALA. KANNEWORFF, 1965:305-318, FIGS. 1-5, TABLE 1.
AMPELISCA MACROCEPHALA. MILLS, 1965:122, (IN PART).
AMPELISCA MACROCEPHALA. J.L.BARNARD, 1966A:53, TABLES 14-16,18,22.
AMPELISCA MACROCEPHALA. J.L.BARNARD, 1966B:15.
AMPELISCA MACROCEPHALA. J.L.BARNARD, 1967A:5.
AMPELISCA MACROCEPHALA. MILLS, 1967:640,642, FIG. 2, (IN PART).
AMPELISCA MACROCEPHALA MACROCEPHALA. J.L.BARNARD, 1971A:2, TABLE 1.
AMPELISCA MACROCEPHALA. BOUSFIELD, 1973:133, PL. 36, (KEY).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
FALKLAND ISLANDS: SHALLOW BAY, LOW TIDE (TRRS).
MAGELLANIC AREA: CAPE VIRGENES, 58 M (AS).
ROSS SEA: COULMAN ISLAND, 180 M (AOW).
SOUTH GEORGIA: CUMBERLAND BAY, 120-250 M (KHB).

DEPTH RANGE: LOW TIDE-540 M.

EXTRINSIC DISTRIBUTION: NORTH ATLANTIC OCEAN; NORTH POLAR SEA; NORTH PACIFIC OCEAN.

AMPELISCA STATENENSIS K.H.BARNARD

AMPELISCA STATENENSIS K.H.BARNARD, 1932:84, FIG. 39.
AMPELISCA STATENENSIS. J.L.BARNARD, 1958B:21.
AMPELISCA STATENENSIS. J.L.BARNARD, 1960A:10,21, (KEY).

DISTRIBUTION: MAGELLANIC AREA: CAPE HORN, 54 00 S 64 57 W, 113 M (KHB).

AMPELISCA SUBANTARCTICA (SCHELLENBERG)

BYBLIS SUBANTARCTICA SCHELLENBERG, 1931:57, FIG. 30.
BYBLIS SUBANTARCTICA. J.L.BARNARD, 1958B:22.
AMPELISCA SUBANTARCTICA. J.L.BARNARD, 1966A:55.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS).

BYBLIS ANTARCTICA SCHELLENBERG

BYBLIS ANTARCTICA SCHELLENBERG, 1931:59, FIG. 31.
BYBLIS ANTARCTICA. K.H.BARNARD, 1932:85, FIG. 40.
BYBLIS ANTARCTICA. J.L.BARNARD, 1958B:22.
BYBLIS ANTARCTICA. J.L.BARNARD, 1966A:56, (KEY).

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).
WEDDELL SEA: 65 56 S 54 35 W, 920 M (AS).

DEPTH RANGE: 342-920 M.

BYBLIS SECURIGER (K.H.BARNARD)

HAPLOOPS SECURIGER K.H.BARNARD, 1931A:426.
HAPLOOPS SECURIGER. K.H.BARNARD, 1932:88, FIG. 42.
HAPLOOPS SECURIGER. STEPHENSEN, 1947:37.
HAPLOOPS SECURIGER. J.L.BARNARD, 1958B:22.
BYBLIS SECURIGER. J.L.BARNARD, 1961:66.
BYBLIS SECURIGER. J.L.BARNARD, 1966A:56, (KEY).

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND WEST BAY, 110 M; CUMBERLAND BAY, 120-250 M; STROMNESS HARBOUR, 122-178 M; 53 48 S 35 37 W, 728 M; 54 08 S 36 27 W, 106 M; 54 59 S 35 24 W, 130 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB); BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 106-750 M.

BYBLISOIDES JUXTACORNIS K.H.BARNARD

BYBLISOIDES JUXTACORNIS K.H.BARNARD, 1931A:426.
BYBLISOIDES JUXTACORNIS. K.H.BARNARD, 1932:87, FIG. 41.
BYBLISOIDES ? JUXTACORNIS. DAHL, 1954:282, FIGS. 1-13.
BYBLISOIDES JUXTACORNIS. J.L.BARNARD, 1958B:22.
BYBLISOIDES JUXTACORNIS. J.L.BARNARD, 1964B:16, (KEY).

DISTRIBUTION: PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-335 M; ANVERS ISLAND, FOURNIER BAY, 295 M (KHB).
ROSS SEA: 'DISCOVERY INLET', 550 M (ED).

DEPTH RANGE: 160-550 M.

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AMPHILOCHIDAE

AMPHILOCHINAE

AMPHILOCHELLA SIMPLICARPUS SCHELLENBERG

AMPHILOCHELLA SIMPLICARPUS SCHELLENBERG, 1926A:307, FIG. 33.
AMPHILOCHELLA SIMPLICARPUS. J.L.BARNARD, 1958B:23.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

AMPHILOCHUS MARIONIS STEBBING

AMPHILOCHUS MARIONIS STEBBING, 1888:743, PL. 38.
AMPHILOCHUS TENUIMANUS. DELLA VALLE, 1893:595, (IN PART).
AMPHILOCHUS MARIONIS. STEBBING, 1906:151.
AMPHILOCHUS MARIONIS. STEBBING, 1910A:577,636.
GITANOPSIS MARIONIS. SCHELLENBERG, 1926A:302.
AMPHILOCHUS SQUAMOSUS. STEPHENSEN, 1927:308.
? GITANOPSIS MARIONIS. SCHELLENBERG, 1931:95, FIG. 50, (QUESTIONED BY J.L.BARNARD, 1972C).
? AMPHILOCHUS MARIONIS. SCHELLENBERG, 1938B:17, (QUESTIONED BY J.L.BARNARD, 1972C).
AMPHILOCHUS MARIONIS. J.L.BARNARD, 1955:1.
AMPHILOCHUS MARIONIS. HURLEY, 1955:208,209, (KEY).
GITANOPSIS MARIONIS. J.L.BARNARD, 1958B:24.
AMPHILOCHUS MARIONIS. J.L.BARNARD, 1962C:124, (KEY).
AMPHILOCHUS MARIONIS. J.L.BARNARD, 1964C:51.
AMPHILOCHUS MARIONIS. J.L.BARNARD, 1971B:25.
AMPHILOCHUS MARIONIS. J.L.BARNARD, 1972C:31, (KEY).
GITANOPSIS MARIONIS. BELLAN-SANTINI AND LEDOYER, 1974:643, PL. 1A.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND, LOW TIDE (KS).
KERGUELEN ISLANDS: OBSERVATORY BAY (AS); MORBIHAN BAY, 4-15 M (BS&L).
MAGELLANIC AREA: MAGELLAN SOUND; BEAGLE CHANNEL, 55 10 S 66 15 W, 100 M (AS).
PRINCE EDWARD ISLANDS: MARION ISLAND, 180 M (TRRS).

DEPTH RANGE: LOW TIDE-180 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; GILBERT ISLAND; HAWAII; NEW ZEALAND.

GITANOPSIS INAEQUIPES SCHELLENBERG

GITANOPSIS INAEQUIPES SCHELLENBERG, 1926A:303, FIG. 31.
GITANOPSIS INAEQUIPES. J.L.BARNARD, 1958B:24.
GITANOPSIS INAEQUIPES. J.L.BARNARD, 1962C:130, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

GITANOPSIS SIMPLEX SCHELLENBERG

GITANOPSIS SIMPLEX SCHELLENBERG, 1926A:305, FIG. 32.
GITANOPSIS SIMPLEX. J.L.BARNARD, 1958B:24.
GITANOPSIS SIMPLEX. J.L.BARNARD, 1962C:130, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

GITANOPSIS SQUAMOSA (THOMSON)

AMPHILOCHUS SQUAMOSUS THOMSON, 1880A:4, PL. 1, FIG. 4.
AMPHILOCHUS SQUAMOSUS. THOMSON, 1880B:214, FIGS. 5A,B.
AMPHILOCHUS SQUAMOSUS. THOMSON AND CHILTON, 1886:149.
AMPHILOCHUS SQUAMOSUS. DELLA VALLE, 1893:597.
AMPHILOCHUS SQUAMOSUS. HUTTON, 1904:258.
AMPHILOCHUS SQUAMOSUS. STEBBING, 1906:161.
GITANOPSIS ANTARCTICA CHEVREUX, 1912:211.
AMPHILOCHUS SQUAMOSUS. CHILTON, 1912:479, (IN PART).
GITANOPSIS ANTARCTICA. CHEVREUX, 1913:104, FIGS. 13-15.
AMPHILOCHUS SQUAMOSUS. CHILTON, 1923A:240, (IN PART).
AMPHILOCHUS SQUAMOSUS. CHILTON, 1923B:84.
GITANOPSIS SQUAMOSA. SCHELLENBERG, 1926A:301.
GITANOPSIS SQUAMOSA. SCHELLENBERG, 1931:95.
GITANOPSIS ANTARCTICA. K.H.BARNARD, 1932:104.
GITANOPSIS ANTARCTICA. STEPHENSEN, 1947:45.
GITANOPSIS SQUAMOSA. STEPHENSEN, 1949:6.
GITANOPSIS ANTARCTICA. STEPHENSEN, 1949:6.
GITANOPSIS SQUAMOSA. HURLEY, 1955:208,213, FIGS. 91-118, (KEY).
GITANOPSIS SQUAMOSA. J.L.BARNARD, 1958B:24.
GITANOPSIS SQUAMOSA. J.L.BARNARD, 1962C:130, (KEY).
GITANOPSIS SQUAMOSA. J.L.BARNARD, 1972C:31,36, (KEY).
GITANOPSIS SQUAMOSA. BELLAN-SANTINI AND LEDOYER, 1974:643,PL. 1B.
GITANOPSIS SQUAMOSA. LOWRY, 1974:102,122, FIGS. 3G,H, (KEY).
GITANOPSIS SQUAMOSA. THURSTON, 1974A:23.
GITANOPSIS SQUAMOSA. THURSTON, 1974B:17.
NOT AMPHILOCHUS SQUAMOSUS. STEPHENSEN, 1927:308, (=AMPHILOCHUS MARIONIS).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND, LOW TIDE (KS).
KERGUELEN ISLANDS: (AS); 4-5 M (BS&L).
MAGELLANIC AREA: PUERTO PANTALON, LOW TIDE (AS).
PALMER ARCHIPELAGO: PORT LOCKROY, 20-30 M (KS), GOUDIER ISLAND, LOW TIDE-1 M (MHT); WILHELMINA BAY, 64 30 S 62 W (DEH).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 38 M (KHB); OFF GRYTVIKEN, 30 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC); SIGNY ISLAND, BORGE BAY, LITTORAL-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, 3 M (EC).

DEPTH RANGE: LOW TIDE-75 M.

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

PSEUDAMPHILOCHUS SHOEMAKERI SCHELLENBERG

PSEUDAMPHILOCHUS SHOEMAKERI SCHELLENBERG, 1931:93, FIG. 49.
PSEUDAMPHILOCHUS SHOEMAKERI. J.L.BARNARD, 1958B:24.

DISTRIBUTION: SOUTH GEORGIA: OFF GRYTVIKEN, 12-15 M (AS).

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AMPITHOIDAE

AMPITHOE BREVIPES DANA

AMPHITOE BREVIPES DANA, 1852:216.
AMPHITHOE BREVIPES. DANA, 1853-55:936, PL. 64, FIG. 5.
AMPHITHOE PEREGRINA DANA, 1853-55:940, PL. 64, FIG. 4.
AMPHITHOE FALKLANDI BATE, 1862:237, PL. 41, FIG. 6.
AMPHITHOE PEREGRINA. BATE, 1862:247, PL. 43, FIG. 1.
AMPHITHOE BREVIPES. BATE, 1862:248, PL. 43, FIG. 2.
AMPHITHOE RUBRICATA. DELLA VALLE, 1893:456, (IN PART, PART =AMPITHOE FEMORATA).
AMPITHOE BREVIPES. STEBBING, 1906:637.
AMPITHOE BREVIPES. STEBBING, 1914:371.
AMPHITHOE BREVIPES. K.H.BARNARD, 1916:255, PL. 28, FIG. 34.
AMPITHOE BREVIPES. K.H.BARNARD, 1932:239, FIG. 150.
AMPITHOE BREVIPES. STEPHENSEN, 1949:44.
AMPITHOE BREVIPES. J.L.BARNARD, 1958B:25.
AMPITHOE BREVIPES. K.H.BARNARD, 1965:208.

DISTRIBUTION: FALKLAND ISLANDS: 2 M (TRRS); PORT STANLEY, 0-16 M; PORT WILLIAM, SPARROW COVE, 10-16 M (KHB).
MAGELLANIC AREA: HERMITE ISLAND, 9 M (JDD).

DEPTH RANGE: 0-16 M.

EXTRINSIC DISTRIBUTION: CALIFORNIA; CHILE; GOUGH ISLAND; SOUTH AFRICA; TRISTAN DA CUNHA.

AMPITHOE FEMORATA KROYER

AMPHITHOE FEMORATA KROYER, 1845:335, PL. 3, FIG. 4.
AMPHITHOE RUBRICATA. DELLA VALLE, 1893:456, (IN PART, PART =AMPITHOE BREVIPES).
AMPITHOE FEMORATA. STEBBING, 1906:636.
AMPHITHOE FEMORATA. CHILTON, 1921C:88, FIG. 3.
AMPHITHOE FEMORATA. SCHELLENBERG, 1931:245, FIG. 127.
AMPHITHOE FEMORATA. SCHELLENBERG, 1935:233.
AMPITHOE FEMORATA. J.L.BARNARD, 1952:24, PLS. 6,7.
AMPITHOE FEMORATA. J.L.BARNARD, 1958B:25.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS; PORT STANLEY, 2 M (AS).
MAGELLANIC AREA: FORTESCUE BAY, 18-22 M; PUERTO CHURRUCA, 36 M; PUNTA ARENAS, 13-14 M; SMYTH CHANNEL; BAHIA INUTIL, 20-27 M; BRIDGES ISLANDS, 13 M; NAVARINO ISLAND; NUEVA ISLAND, 14 M; PUERTO HOPE, 11-18 M; PUERTO PANTALON; PORVENIR, 11-18 M; USHUAIA BAY; PICTON ISLAND, 7 M (AS).

DEPTH RANGE: 2-36 M.

EXTRINSIC DISTRIBUTION: CHILE.

AMPITHOE KERGUELENI STEBBING

AMPHITHOE KERGUELENI STEBBING, 1888:1116, PL. 117.
AMPHITHOE KERGUELENI. DELLA VALLE, 1893:463, (IN PART).
AMPITHOE KERGUELENI. STEBBING, 1906:638.
AMPITHOE KERGUELENI. J.L.BARNARD, 1958B:25.
AMPITHOE KERGUELENI. SURYA RAO, 1974:191.

DISTRIBUTION: KERGUELEN ISLANDS: (TRRS).

EXTRINSIC DISTRIBUTION: INDIA.

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COLOMASTIGIDAE

COLOMASTIX CASTELLATA K.H.BARNARD

COLOMASTIX CASTELLATA K.H.BARNARD, 1932:115, FIG. 64.
COLOMASTIX CASTELLATA. HURLEY, 1954C:420, (KEY).
COLOMASTIX CASTELLATA. J.L.BARNARD, 1958B:34.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).

COLOMASTIX FISSILINGUA SCHELLENBERG

COLOMASTIX FISSILINGUA SCHELLENBERG, 1926A:324, FIG. 42.
COLOMASTIX PUSILLA. WALKER, 1907:38.
COLOMASTIX BRAZIERI. CHILTON, 1912:484.
COLOMASTIX FISSILINGUA. SCHELLENBERG, 1931:114.
COLOMASTIX FISSILINGUA. K.H.BARNARD, 1932:114, FIG. 63.
COLOMASTIX FISSILINGUA. HURLEY, 1954C:420, (KEY).
COLOMASTIX FISSILINGUA. J.L.BARNARD, 1958B:34.
COLOMASTIX FISSILINGUA. BELLAN-SANTINI AND LEDOYER, 1974:646.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
FALKLAND ISLANDS: PORT ALBEMARLE, 15-40 M; BERKELEY SOUND, 16 M; 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 135-150 M (AS).
KERGUELEN ISLANDS: OBSERVATORY BAY (AS), 10 M (BS&L); MORBIHAN BAY, 0-15 M, CHAT ISLAND, PORT AUX FRANCAIS, 2 M, MOULES ISLAND, LOW TIDE, AUSTRALIA ISLAND, 24 M, JOLIETTE COVE, 10-54 M, LABOUREUR SOUND, 10-35 M (BS&L).
MAGELLANIC AREA: PUERTO CONDOR, 90 M; ULTIMA ESPERANZA, 13-18 M (AS).
ROSS SEA: HUT POINT (AOW).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 179-235 M; 53 55 S 38 01 W, 107 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC).

DEPTH RANGE: 0-385 M.

COLOMASTIX SIMPLICICAUDA NICHOLLS

COLOMASTIX SIMPLICICAUDA NICHOLLS, 1938:62, FIG. 32.
COLOMASTIX SIMPLICICAUDA. HURLEY, 1954C:420, (KEY).
COLOMASTIX SIMPLICAUDA. J.L.BARNARD, 1958B:34.
COLOMASTIX SIMPLICAUDA. J.L.BARNARD, 1972C:48.

DISTRIBUTION: MACQUARIE ISLAND: NORTH END (GEN).

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COROPHIIDAE

(=AORIDAE, ISAEIDAE, PHOTIDAE)

AORA ANOMALA SCHELLENBERG

AORA TYPICA F. ANOMALA SCHELLENBERG, 1926A:372, FIG. 59.
AORA TYPICA. K.H.BARNARD, 1916:236.
? AORA TYPICA. CHILTON, 1921C:87.
AORA TYPICA. SCHELLENBERG, 1926B:230.
AORA TYPICA ANOMALA. SCHELLENBERG, 1931:230.
AORA TYPICA FORMA ANOMALA. K.H.BARNARD, 1940:519.
AORA TYPICA. J.L.BARNARD, 1958B:28, (IN PART).
AORA ANOMALA. J.L.BARNARD, 1972C:124.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M; PORT LOUIS, 1 M (AS). MAGELLANIC AREA: FORTESCUE BAY, 18-22 M; PUNTA ARENAS, 13-14 M; BEAGLE CHANNEL, 100 M; PUERTO HOPE, 11-18 M; USHUAIA BAY, 4-27 M (AS).

DEPTH RANGE: 1-100 M.

EXTRINSIC DISTRIBUTION: JUAN FERNANDEZ ISLANDS; SOUTH AFRICA.

AORA KERGUELENI STEBBING

AORA KERGUELENI STEBBING, 1888:1073, PL. 109, FIGS. A,D.
AORA KERGUELENI. DELLA VALLE, 1893:410.
AORA TYPICA. STEBBING, 1906:587, FIG. 101, (IN PART).
AORA TYPICA. J.L.BARNARD, 1958B:28, (IN PART).
AORA KERGUELENI. J.L.BARNARD, 1972C:124.
AORA TYPICA. BELLAN-SANTINI AND LEDOYER, 1974:643, PL. 1C.

DISTRIBUTION: KERGUELEN ISLANDS: CAPE MACLEAR, 54 M; ROYAL SOUND, 68 M (TRRS); MORBIHAN BAY, 4-15 M, AUSTRALIA ISLAND, 24 M, PENDER ISLAND, 50 M (BS&L).

DEPTH RANGE: 4-68 M.

AORA MACULATA (THOMSON)

MICRODEUTOPUS MACULATUS THOMSON, 1879B:331, PL. 16, FIGS. 5-8.
AORA TYPICA. THOMSON, 1879B:331.
MICRODEUTEROPUS TENUIPES HASWELL, 1880A:339, PL. 22, FIG. 1.
MICRODEUTEROPUS MORTONI HASWELL, 1880A:339, PL. 22, FIG. 2.
AORA TYPICA. THOMSON, 1880B:216.
MICRODENTOPUS MACULATUS. THOMSON, 1880B:217, FIGS. 7A-C.
MICRODENTOPUS MACULATUS. CHILTON, 1882:173, PL. 8, FIGS. 3A,B.
MICRODEUTOPUS MORTONI. HASWELL, 1882:264.
MICRODEUTOPUS TENUIPES. HASWELL, 1882:264.
MICRODEUTEROPUS MORTONI. CHILTON, 1884B:1040.
MICRODEUTEROPUS TENUIPES. CHILTON, 1884B:1040.
AORA TYPICA. THOMSON AND CHILTON, 1886:147.
AORA TYPICA. THOMSON, 1889:261.
AORA TYPICA. DELLA VALLE, 1893:409, PL. 56, FIGS. 38-40, (IN PART).
AORA TYPICA. HUTTON, 1904:260.
AORA TYPICA. STEBBING, 1906:587, FIG. 101, (IN PART).
? AORA TYPICA. CHILTON, 1909A:645, (QUESTIONED BY J.L.BARNARD, 1972C).
? AORA TYPICA. CHILTON, 1911B:565, (QUESTIONED BY J.L.BARNARD, 1972C).
AORA TYPICA. THOMSON, 1913:245.
? AORA TYPICA. STEPHENSEN, 1927:352, (QUESTIONED BY J.L.BARNARD, 1972C).
? AORA TYPICA. STEPHENSEN, 1938:261, (QUESTIONED BY J.L.BARNARD, 1972C).
AORA TYPICA. J.L.BARNARD, 1958B:28, (IN PART).
AORA MACULATA. J.L.BARNARD, 1972C:27,124, FIGS. 10F-H, (KEY).
AORA MACULATA. LOWRY, 1974:102,122, FIG. 5A, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: MUSGRAVE HARBOUR (CC); PORT ROSS, 19 M (KS). CAMPBELL ISLAND: PERSEVERANCE HARBOUR (KS).

EXTRINSIC DISTRIBUTION: AUSTRALIA; KERMADEC ISLANDS; NEW ZEALAND.

AORA TRICHOBOSTRYCHUS STEBBING

AORA TRICHOBOSTRYCHUS STEBBING, 1888:1078, PL. 109, FIGS. B,C.
AORA TRICHOBOSTRYCUS. DELLA VALLE, 1893:410.
AORA TYPICA. STEBBING, 1906:587, FIG. 101, (IN PART).
AORA TYPICA. J.L.BARNARD, 1958B:28, (IN PART).
AORA TRICHOBOSTRYCHUS. J.L.BARNARD, 1972C:124.

DISTRIBUTION: KERGUELEN ISLANDS: CHRISTMAS HARBOUR (TRRS).

AORA SPECIES

? AORA SP. NICHOLLS, 1938:126.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).

COROPHIUM BONELLII MILNE EDWARDS

COROPHIA BONELLII MILNE EDWARDS, 1830:385.
COROPHIUM BONELLII. MILNE EDWARDS, 1840:67.
COROPHIUM BONELLII. BATE, 1862:282.
COROPHIUM BONELLI. HELLER, 1866:51.
COROPHIUM BONELLI. SARS, 1882:112.
COROPHIUM BONELLII. CHEVREUX AND BOUVIER, 1893:140.
COROPHIUM BONELLII. DELLA VALLE, 1893:368.
COROPHIUM BONELLI. SARS, 1895:616, PL. 221, FIG. 1.
COROPHIUM BONELLII. WALKER, 1898:170,172.
COROPHIUM BONELLII. CHEVREUX, 1900:109.
COROPHIUM BONELLII. STEBBING, 1906:691.
COROPHIUM BONNELLII. WALKER, 1909:343.
COROPHIUM BONELLI. CHEVREUX, 1911A:271.
COROPHIUM BONELLI. WALKER, 1914:559.
COROPHIUM BONELLII. SHOEMAKER, 1920:22E.
? COROPHIUM BONELLI. USSING AND STEPHENSEN, 1924:69-78, FIGS. 1-3, (QUESTIONED BY CRAWFORD, 1937).
COROPHIUM BONELLI. CHEVREUX AND FAGE, 1925:369, FIG. 377.
COROPHIUM BONELLII. K.H.BARNARD, 1930:393.
? COROPHIUM PSEUDACHERUSICUM SCHELLENBERG, 1931:258, FIG. 134, (QUESTIONED BY CRAWFORD, 1937).
COROPHIUM BONELLII. K.H.BARNARD, 1932:244.
COROPHIUM BONELLI. CRAWFORD, 1937:608, FIGS. 2H-O.
COROPHIUM BONELLI. DAHL, 1946:6.
COROPHIUM BONELLI. ENEQUIST, 1949:377.
COROPHIUM BONELLI. GURJANOVA, 1951:978, FIG. 681.
COROPHIUM BONELLI. J.L.BARNARD, 1958B:35.
COROPHIUM BONNELLII. INGLE, 1972:327.
COROPHIUM BONELLI. BOUSFIELD, 1973:200,202, PL. 62, (KEY).
COROPHIUM BONELLI. SANDERSON, 1973:8.
NOT COROPHIUM BONELLII. BATE AND WESTWOOD, 1863,1868:497, (VOL. 1) FIG., (=COROPHIUM CRASSICORNE).

DISTRIBUTION: MAGELLANIC AREA: PUNTA ARENAS; PICTON ISLAND, BANNER COVE, 5 M; USHUAIA BAY, 2-22 M (AS).

DEPTH RANGE: 2-22 M.

EXTRINSIC DISTRIBUTION: ALASKA; NORTH AND SOUTH ATLANTIC OCEANS; SUEZ.

COROPHIUM CYLINDRICUM (SAY)

PODOCERUS CYLINDRICUS SAY, 1818:387.
COROPHIUM CYLINDRICUM. VERRILL AND SMITH, 1873:370,566.
COROPHIUM CYLINDRICUM. DELLA VALLE, 1893:376.
COROPHIUM CYLINDRICUM. HOLMES, 1905:521, FIG.
COROPHIUM CYLINDRICUM. PAULMIER, 1905:167, FIG. 37.
COROPHIUM CYLINDRICUM. RATHBUN, 1905:75.
COROPHIUM CYLINDRICUM. STEBBING, 1906:692,740.
COROPHIUM CYLINDRICUS. STEBBING, 1914:372.

COROPHIUM CYLINDRICUM. KUNKEL, 1918:171, FIG. 52.
COROPHIUM CYLINDRICUM. SHOEMAKER, 1930:346.
COROPHIUM CYLINDRICUM. K.H.BARNARD, 1932:244.
COROPHIUM CYLINDRICUM. J.L.BARNARD, 1958B:36, (DUBIOUS SPECIES).

DISTRIBUTION: FALKLAND ISLANDS: (TRRS); PORT STANLEY, SHORE (KHB).

EXTRINSIC DISTRIBUTION: NORTH-WEST ATLANTIC OCEAN.

GAMMAROPSIS (GAMMAROPSIS) BENNETTI THURSTON

GAMMAROPSIS BENNETTI THURSTON, 1974B:44, FIGS. 13,14, (KEY).

DISTRIBUTION: SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT).

GAMMAROPSIS CTENURUS (SCHELLENBERG)

EURYSTHEUS CTENURUS SCHELLENBERG, 1931:240, FIG. 123.
EURYSTHEUS CTENURUS. J.L.BARNARD, 1958B:112.
MEGAMPHOPUS (MEGAMPHOPUS) CTENURUS. J.L.BARNARD, 1962A:14,15.
MEGAMPHOPUS CTENURUS. J.L.BARNARD, 1964D:238, (KEY).
GAMMAROPSIS CTENURUS. J.L.BARNARD, 1973A:17, (UNNAMED SUBDIVISION).
MEGAMPHOPUS CTENURUS. THURSTON, 1974B:41.

DISTRIBUTION: MAGELLANIC AREA: 52 29 S 60 36 W, 197 M (AS).

GAMMAROPSIS (GAMMAROPSIS) DENTIFER (HASWELL)

MOERA DENTIFERA HASWELL, 1880B:332, PL. 20, FIG. 4.
PARANAENIA TYPICA CHILTON, 1884A:259, PL. 19, FIGS. 1A-H.
PARANAENIA DENTIFERA. CHILTON, 1884A:260, PL. 21, FIGS. 2A-C.
PARANAENIA DENTIFERA. DELLA VALLE, 1893:441, (IN PART).
GAMMAROPSIS DENTIFERA. STEBBING, 1899B:350.
EURYSTHEUS DENTIFER. STEBBING, 1906:615.
EURYSTHEUS DENTIFER. SCHELLENBERG, 1931:243, FIG. 125.
EURYSTHEUS DENTIFER. SCHELLENBERG, 1935:233.
EURYSTHEUS DENTIFER. STEPHENSEN, 1949:44.
EURYSTHEUS DENTIFER. J.L.BARNARD, 1958B:112.
EURYSTHEUS (EURYSTHEUS) DENTIFER. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) DENTIFER. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS DENTIFER. BELLAN-SANTINI AND LEDOYER, 1974:674, PL. 20A.
GAMMAROPSIS DENTIFER. THURSTON, 1974B:42, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, CARENAGE CREEK, 1 M, GREENPATCH; PORT WILLIAM, 22-40 M; PORT ALBEMARLE, 40 M; PORT STANLEY, 2 M (AS).
KERGUELEN ISLANDS: MORBIHAN BAY, JOLIETTE COVE, 10-54 M, CHAT ISLAND (BS&L).
MAGELLANIC AREA: PUERTO PANTALON; BEAGLE CHANNEL, 100 M; NUEVA ISLAND, 14 M; PICTON ISLAND, BANNER COVE, 5 M; PUNTA ARENAS; 54 43 S 64 08 W, 36 M (AS).

DEPTH RANGE: 1-100 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; CHILE; NEW ZEALAND; SOUTH ATLANTIC OCEAN.

GAMMAROPSIS (GAMMAROPSIS) DIMORPHUS (K.H.BARNARD)

EURYSTHEUS DIMORPHUS K.H.BARNARD, 1932:224, FIG. 139.
EURYSTHEUS DIMORPHUS. J.L.BARNARD, 1958B:112.
EURYSTHEUS (EURYSTHEUS) DIMORPHUS. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) DIMORPHUS. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS DIMORPHUS. THURSTON, 1974B:44, (KEY).

DISTRIBUTION: SOUTH GEORGIA: OFF 'JASON LIGHT', 238-270 M; CUMBERLAND BAY, 230-250 M; STROMNESS HARBOUR, 122-178 M; OFF CAPE SAUNDERS, 132-148 M; CUMBERLAND EAST BAY, 200-234 M; JASON HARBOUR, 60-160 M (KHB).

DEPTH RANGE: 60-270 M.

GAMMAROPSIS (PODOCEROPSIS) ELEPHANTIS K.H.BARNARD

PODOCEROPSIS ELEPHANTIS K.H.BARNARD, 1932:234, FIG. 147.
PODOCEROPSIS ELEPHANTIS. J.L.BARNARD, 1958B:115.
MEGAMPHOPUS (MEGAMPHOPUS) ELEPHANTIS. J.L.BARNARD, 1962A:15.
MEGAMPHOPUS ELEPHANTIS. J.L.BARNARD, 1964D:238, (KEY).
GAMMAROPSIS (PODOCEROPSIS) ELEPHANTIS. J.L.BARNARD, 1973A:17.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

GAMMAROPSIS (GAMMAROPSIS) EXSERTIPES STEBBING

GAMMAROPSIS EXSERTIPES STEBBING, 1888:1093, PL. 112.
PROTOMEDEIA EXSERTIPES. DELLA VALLE, 1893:440, PL. 57, FIG. 12.
EURYSTHEUS EXSERTIPES. STEBBING, 1906:614, FIG. 107.
EURYSTHEUS EXSERTIPES. J.L.BARNARD, 1958B:112.
EURYSTHEUS (EURYSTHEUS) EXSERTIPES. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) EXSERTIPES. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS EXSERTIPES. THURSTON, 1974B:43, (KEY).

DISTRIBUTION: KERGUELEN ISLANDS: (TRRS).

GAMMAROPSIS GEORGIANUS (SCHELLENBERG)

EURYSTHEUS GEORGIANUS SCHELLENBERG, 1931:236, FIG. 120.
EURYSTHEUS GEORGIANUS. J.L.BARNARD, 1958B:112.
MEGAMPHOPUS (MEGAMPHOPUS) GEORGIANUS. J.L.BARNARD, 1962A:14,15.
MEGAMPHOPUS GEORGIANUS. J.L.BARNARD, 1964D:238, (KEY).
GAMMAROPSIS GEORGIANUS. J.L.BARNARD, 1973A:17, (UNNAMED SUBDIVISION).
MEGAMPHOPUS GEORGIANUS. THURSTON, 1974B:41.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 252-310 M (AS).

GAMMAROPSIS KERGUELENI (SCHELLENBERG)

EURYSTHEUS KERGUELENI SCHELLENBERG, 1926A:379, FIG. 63.
EURYSTHEUS KERGUELENI. SCHELLENBERG, 1926B:231.
EURYSTHEUS KERGUELENI. J.L.BARNARD, 1958B:112.
MEGAMPHOPUS (MEGAMPHOPUS) KERGUELENI. J.L.BARNARD, 1962A:14,15.
MEGAMPHOPUS KERGUELENI. J.L.BARNARD, 1964D:238, (KEY).
GAMMAROPSIS KERGUELENI. J.L.BARNARD, 1973A:17, (UNNAMED SUBDIVISION).
GAMMAROPSIS KERGUELENI. BELLAN-SANTINI AND LEDOYER, 1974:674, PL. 20B.
MEGAMPHOPUS KERGUELENI. THURSTON, 1974B:41.

DISTRIBUTION: KERGUELEN ISLANDS: GAZELLE HARBOUR, 5-10 M; OBSERVATORY BAY (AS), (BS&L); MORBIHAN BAY, 15 M, BENIGUET REEF, 35 M, BOSSIERE FJORD, 5 M, PORT JEANNE-D'ARC, 14-17 M, LABOUREUR SOUND, 10-35 M, JOLIETTE COVE, 10-54 M, CHAT ISLAND (BS&L).

DEPTH RANGE: 5-54 M.

GAMMAROPSIS LONGICORNIS WALKER

GAMMAROPSIS LONGICORNIS WALKER, 1906C:153.
EURYSTHEUS LONGICORNIS. WALKER, 1907:35, PL. 12, FIG. 21.
EURYSTHEUS PARVUS SCHELLENBERG, 1926A:376, FIG. 61.
EURYSTHEUS TRIGONURUS SCHELLENBERG, 1926A:381, FIG. 64.
EURYSTHEUS LONGICORNIS. SCHELLENBERG, 1931:245.
EURYSTHEUS LONGICORNIS. J.L.BARNARD, 1958B:112.
MEGAMPHOPUS (MEGAMPHOPUS) LONGICORNIS. J.L.BARNARD, 1962A:14,15.
MEGAMPHOPUS LONGICORNIS. J.L.BARNARD, 1964D:328, (KEY).
GAMMAROPSIS LONGICORNIS. J.L.BARNARD, 1973A:17, (UNNAMED SUBDIVISION).
GAMMAROPSIS LONGICORNIS. BELLAN-SANTINI AND LEDOYER, 1974:677, PL. 20C.
MEGAMPHOPUS LONGICORNIS. THURSTON, 1974A:92.
MEGAMPHOPUS LONGICORNIS. THURSTON, 1974B:41.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
KERGUELEN ISLANDS: OBSERVATORY BAY (AS); MORBIHAN BAY, 15 M, LABOUREUR SOUND, 61 M, BENIGUET REEF, 35 M, JOLIETTE COVE, 10-54 M (BS&L).
MAGELLANIC AREA: 52 29 S 60 36 W, 197 M (AS).
ROSS SEA: WINTER QUARTERS BAY, 18 M (AOW).

SOUTH GEORGIA: CUMBERLAND BAY, 252-310 M (AS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 2-9 M (MHT).

DEPTH RANGE: 2-385 M.

GAMMAROPSIS (GAMMAROPSIS) LONGITARSUS (SCHELLENBERG)

EURYSTHEUS LONGITARSUS SCHELLENBERG, 1931:242, FIG. 124.
EURYSTHEUS LONGITARSUS. J.L.BARNARD, 1958B:112.
EURYSTHEUS (EURYSTHEUS) LONGITARSUS. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) LONGITARSUS. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS LONGITARSUS. THURSTON, 1974B:44, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: PORT WILLIAM, 22 M; PORT LOUIS, GREENPATCH; PORT STANLEY, 2 M (AS).
MAGELLANIC AREA: BEAGLE CHANNEL, 100 M; PICTON ISLAND, 7 M (AS).

DEPTH RANGE: 2-100 M.

GAMMAROPSIS (GAMMAROPSIS) MONODI (SCHELLENBERG)

EURYSTHEUS MONODI SCHELLENBERG, 1931:238, FIG. 121.
EURYSTHEUS SP. MONOD, 1926:60, FIG. 57.
EURYSTHEUS EURYPODII K.H.BARNARD, 1932:231, FIG. 145.
EURYSTHEUS MONODI. RUFFO, 1949:56.
EURYSTHEUS MONODI. J.L.BARNARD, 1958B:112.
EURYSTHEUS (EURYSTHEUS) MONODI. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) MONODI. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS MONODI. THURSTON, 1974B:43, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: BERKELEY SOUND, 16 M; PORT WILLIAM, 12-22 M; PORT ALBEMARLE, 40 M (AS); EAST FALKLAND ISLAND, PORT STANLEY, 10-16 M (KHB).
MAGELLANIC AREA: USHUAIA BAY, LOW TIDE; SARMIENTO BANK, 52 24 S 68 09 W, 45 M (AS); BEAGLE CHANNEL, PUERTO HARBERTON (SR).

DEPTH RANGE: LOW TIDE-45 M.

EXTRINSIC DISTRIBUTION: ARGENTINA.

GAMMAROPSIS (GAMMAROPSIS) PURPURESCENS (K.H.BARNARD)

EURYSTHEUS PURPURESCENS K.H.BARNARD, 1932:226, FIG. 140.
EURYSTHEUS PURPURESCENS. J.L.BARNARD, 1958B:113.
EURYSTHEUS (EURYSTHEUS) PURPURESCENS. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) PURPURESCENS. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS PURPURESCENS. THURSTON, 1974B:43, (KEY).

DISTRIBUTION: PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 179-235 M (KHB).
SOUTH ORKNEY ISLANDS: OFF SIGNY ISLAND, 244-344 M (KHB).

DEPTH RANGE: 90-344 M.

GAMMAROPSIS (GAMMAROPSIS) REMIPES (K.H.BARNARD)

EURYSTHEUS REMIPES K.H.BARNARD, 1932:229, FIG. 143.
EURYSTHEUS AFER. CHILTON, 1912:510, PL. 2, FIGS. 30-34.
EURYSTHEUS REMIPES. J.L.BARNARD, 1958B:113.
EURYSTHEUS (EURYSTHEUS) REMIPES. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
EURYSTHEUS REMIPES. K.H.BARNARD, 1965:208.
GAMMAROPSIS (GAMMAROPSIS) REMIPES. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS REMIPES. THURSTON, 1974B:42, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, OFF EDDYSTONE ROCK, 105-115 M (KHB).

EXTRINSIC DISTRIBUTION: GOUGH ISLAND.

GAMMAROPSIS (GAMMAROPSIS) SERRICRUS (K.H.BARNARD)

EURYSTHEUS SERRICRUS K.H.BARNARD, 1932:228, FIG. 142.
EURYSTHEUS SERRICRUS. J.L.BARNARD, 1958B:113.
EURYSTHEUS (EURYSTHEUS) SERRICRUS. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) SERRICRUS. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS SERRICRUS. THURSTON, 1974B:44, (KEY).

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 230-250 M; STROMNESS HARBOUR, 122-136 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 122-342 M.

GAMMAROPSIS (PSEUDEURYSTHEUS) SUBLITORALIS SCHELLENBERG

PSEUDEURYSTHEUS SUBLITORALIS SCHELLENBERG, 1931:234, FIG. 119.
MEGAMPHOPUS BLAISUS K.H.BARNARD, 1932:233, FIG. 146.
MEGAMPHOPUS BLAISUS. J.L.BARNARD, 1958B:114.
PSEUDEURYSTHEUS SUBLITORALIS. J.L.BARNARD, 1958B:116.
EURYSTHEUS (PSEUDEURYSTHEUS) SUBLITORALIS. J.L.BARNARD, 1962A:14.
MEGAMPHOPUS (SEGAMPHOPUS) BLAISUS. J.L.BARNARD, 1962A:15.
GAMMAROPSIS (PSEUDEURYSTHEUS) SUBLITORALIS. J.L.BARNARD, 1969A:269,271, (BY IMPLICATION).
GAMMAROPSIS (SEGAMPHOPUS) BLAISUS. J.L.BARNARD, 1973A::17, (BY IMPLICATION).
PSEUDEURYSTHEUS SUBLITORALIS. THURSTON, 1974A:92.
PSEUDEURYSTHEUS SUBLITORALIS. THURSTON, 1974B:41.

DISTRIBUTION: SHAG ROCKS: 160 M (AS).
SOUTH GEORGIA: MAIVIKEN, 75 M; CUMBERLAND BAY, 252-310 M (AS), 230-250 M (KHB); STROMNESS HARBOUR, 122-178 M; CUMBERLAND EAST BAY, 17-27 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, PAAL HARBOUR, 20-25 M (MHT).

DEPTH RANGE: 17-310 M.

GAMMAROPSIS (GAMMAROPSIS) TRIODON (SCHELLENBERG)

EURYSTHEUS TRIODON SCHELLENBERG, 1926A:377, FIG. 62.
EURYSTHEUS TRIODON. SCHELLENBERG, 1931:244, FIG. 126.
EURYSTHEUS TRIODON. J.L.BARNARD, 1958B:113.
EURYSTHEUS (EURYSTHEUS) TRIODON. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) TRIODON. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS TRIODON. THURSTON, 1974B:44, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
SHAG ROCKS: 160 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 252-310 M; OFF GRYTVIKEN, 22 M (AS).
SOUTH SHETLAND ISLANDS: 62 55 S 55 27 W, 104 M (AS).

DEPTH RANGE: 22-385 M.

EXTRINSIC DISTRIBUTION: ARGENTINA.

GAMMAROPSIS (GAMMAROPSIS) VALDIVIAE (SCHELLENBERG)

EURYSTHEUS VALDIVIAE SCHELLENBERG, 1926B:232, FIG. 20.
EURYSTHEUS VALDIVIAE. J.L.BARNARD, 1958B:113.
EURYSTHEUS (EURYSTHEUS) VALDIVIAE. J.L.BARNARD, 1962A:14, (BY IMPLICATION).
GAMMAROPSIS (GAMMAROPSIS) VALDIVIAE. J.L.BARNARD, 1969A:271, (BY IMPLICATION).
GAMMAROPSIS VALDIVIAE. THURSTON, 1974B:43, (KEY).

DISTRIBUTION: KERGUELEN ISLANDS: GAZELLE HARBOUR, 5-10 M (AS).

GAMMAROPSIS SPECIES 1

EURYSTHEUS SP. STEPHENSEN, 1927:353.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND, LOW TIDE (KS).

GAMMAROPSIS SPECIES 2

EURYSTHEUS SPP. STEPHENSEN, 1947:70.

DISTRIBUTION: BOUVET ISLAND: CAPE VALDIVIA, 60 M (KS).
PALMER ARCHIPELAGO: PORT LOCKROY, 60-90 M (KS).
SOUTH SHETLAND ISLANDS: BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 60-750 M.

HAPLOCHEIRA BALSSI SCHELLENBERG

HAPLOCHEIRA BALSSI SCHELLENBERG, 1931:232, FIG. 118.
HAPLOCHEIRA BALSSI. J.L.BARNARD, 1958B:113.

DISTRIBUTION: FALKLAND ISLANDS: BERKELEY SOUND, PORT LOUIS, 2-8 M, GREENPATCH, 7 M (AS).
MAGELLANIC AREA: PUNTA ARENAS, 13-14 M; BAHIA INUTIL, 36-54 M (AS).

DEPTH RANGE: 2-54 M.

EXTRINSIC DISTRIBUTION: ARGENTINA.

HAPLOCHEIRA BARBIMANA (THOMSON)

GAMMARUS BARBIMANUS THOMSON, 1879A:241, PL. 10, FIG. D1.
HAPLOCHEIRA TYPICA HASWELL, 1880A:273, PL. 11, FIG. 2.
HAPLOCHEIRA TYPICA. HASWELL, 1882:269.
HAPLOCHEIRA TYPICA. HASWELL, 1885:106, PL. 16, FIGS. 4-8.
COROPHIUM BARBIMANUM. THOMSON AND CHILTON, 1886:143.
HAPLOCHEIRA PLUMOSA STEBBING, 1888:1172, PL. 126.
HAPLOCHEIRA BARBIMANUS. STEBBING, 1888:1177.
LEPTOCHEIRUS BARBIMANUS. DELLA VALLE, 1893:433, PL. 57, FIGS. 4,5.
HAPLOCHEIRA PLUMOSA. WALKER, 1903A:60.
HAPLOCHEIRA BARBIMANA. HUTTON, 1904:261.
HAPLOCHEIRA BARBIMANA. STEBBING, 1906:609, FIGS. 104,105.
HAPLOCHEIRA BARBIMANA. WALKER, 1907:35.
HAPLOCHEIRA BARBIMANA. CHILTON, 1912:510.
HAPLOCHEIRA BARBIMANA. THOMSON, 1913:245.
? HAPLOCHEIRA BARBIMANUS. STEBBING, 1914:370, (QUESTIONED BY NICHOLLS, 1938).
HAPLOCHEIRA BARBIMANUS. SCHELLENBERG, 1926A:375.
HAPLOCHEIRA BARBIMANA. SCHELLENBERG, 1926B:195.
HAPLOCHEIRA BARBIMANA. STEPHENSEN, 1927:352.
HAPLOCHEIRA BARBIMANUS. K.H.BARNARD, 1930:391,450.
HAPLOCHEIRA BARBIMANUS. SCHELLENBERG, 1931:232.
HAPLOCHEIRA BARBIMANUS. K.H.BARNARD, 1932:235.
HAPLOCHEIRA BARBIMANUS. NICHOLLS, 1938:126, FIG. 65.
HAPLOCHEIRA BARBIMANUS. J.L.BARNARD, 1958B:113.
HAPLOCHEIRA BARBIMANA. J.L.BARNARD, 1972C:25,130, (KEY).
HAPLOCHEIRA BARBIMANUS. BELLAN-SANTINI, 1972A:191, PL. 14.
HAPLOCHEIRA BARBIMANUS. BELLAN-SANTINI AND LEDOYER, 1974:677, PL. 20D.
HAPLOCHEIRA BARBIMANUS. THURSTON, 1974A:93, FIGS. 36A-M.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 5-108 M (GEN); GEOLOGIE ARCHIPELAGO, 6-140 M; CAPE JULES, 66 44 S 140 55 E, 15-20 M (DBS).
AUCKLAND ISLANDS: PORT ROSS, 19 M (KS).
FALKLAND ISLANDS: PORT ALBEMARLE, 40 M; BERKELEY SOUND, 16 M; PORT WILLIAM, 22 M; PORT LOUIS, 3-4 M; SPARROW COVE, 11-13 M (AS); PORT STANLEY, LOW TIDE (TRRS).
KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS); OBSERVATORY BAY (AS); MORBIHAN BAY, 15 M, PORT JEANNE-D'ARC, 14-17 M, BOSSIERE FJORD, LOW TIDE-15 M, CHAT ISLAND, PORT DOUZIEME, LITTORAL, BENIGUET REEF, 35 M, LABOUREUR SOUND, 10-61 M, JOLIETTE COVE, PENDER ISLAND, 50 M, AUSTRALIA ISLAND, 24 M, BAUDISSIN SOUND, 18 M (BS&L).
MACQUARIE ISLAND: (GEN).
MAGELLANIC AREA: ULTIMA ESPERANZA, 13-18 M; BAHIA INUTIL, 36-54 M; PUNTA ARENAS, 27 M; RIO SECO, 18-36 M; LARGA ISLAND, SMYTH CHANNEL, 14 M; PUERTO BUENO; USHUAIA BAY, 0-4 M; SARMIENTO BANK, 52 24 S 68 09 W, 22 M; 54 43 S 64 08 W, 36 M (AS).
ROSS SEA: CAPE ADARE, 47 M; FRANKLIN ISLAND, 18-43 M; WINTER QUARTERS BAY, HUT POINT; 'FLAGON POINT' (AOW); MCMURDO SOUND, 13-457 M (KHB).
SOUTH GEORGIA: OFF GRYTVIKEN, 12-52 M (AS); STROMNESS HARBOUR, 122-178 M; CUMBERLAND EAST BAY, 17-27 M; UNDINE HARBOUR, 18-27 M; 54 59 S 35 24 W, 130 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 5-15 M (MHT).

DEPTH RANGE: 0-457 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; NEW ZEALAND.

HAPLOCHEIRA ROBUSTA K.H.BARNARD

HAPLOCHEIRA ROBUSTA K.H.BARNARD, 1932:235, FIG. 148.
HAPLOCHEIRA ROBUSTA. J.L.BARNARD, 1958B:113.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, PORT STANLEY, SHORE-2 M, OFF CAPE PEMBROKE, 82 M, OFF LIVELY ISLAND, 79 M (KHB). MAGELLANIC AREA: 53 53 S 60 34 W, 147-151 M (KHB).

DEPTH RANGE: SHORE-151 M.

KUPHOCHEIRA SETIMANUS K.H.BARNARD

KUPHOCHEIRA SETIMÄNUS K.H.BARNARD, 1931A:429.
KUPHOCHEIRA SETIMANUS. K.H.BARNARD, 1932:238, FIG. 149.
KUPHOCHEIRA SETIMANUS. J.L.BARNARD, 1958B:113.
KUPHOCHEIRA SETIMANUS. THURSTON, 1974A:95, FIGS. 36N-P.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: NORMANNA STRAIT, 24-36 M (KHB); SIGNY ISLAND, BORGE BAY, 10-11 M, PAAL HARBOUR, 20-25 M (MHT).

DEPTH RANGE: 10-36 M.

LEMBOS FUEGIENSIS (DANA)

GAMMARUS FUEGIENSIS DANA, 1853-55:954, PL. 65, FIGS. 8A-H.
MOERA FUEGIENSIS. BATE, 1862:194, PL. 35, FIG. 4.
LEMBOS FUEGIENSIS. STEBBING, 1906:600.
LEMBOS FUEGIENSIS. STEBBING, 1914:369, PL. 9.
LEMBOS FUEGIENSIS. SCHELLENBERG, 1931:231, FIG. 117.
LEMBOS FUEGIENSIS. K.H.BARNARD, 1932:221, FIG. 136.
LEMBOS FUEGIENSIS. J.L.BARNARD, 1958B:28.

DISTRIBUTION: BURDWOOD BANK: 137-150 M (AS). FALKLAND ISLANDS: 4-7 M (TRRS); PORT LOUIS; PORT STANLEY, 2 M; PORT WILLIAM, 17 M (AS); EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB). MAGELLANIC AREA: CAPE VALENTINA, 270 M; DUNGENESS POINT, 18 M; PUNTA ARENAS; BAHIA INUTIL, 36-54 M; HARRIS BAY, 27 M; PUERTO HOPE, 11-18 M; PUERTO PANTALON; USHUAIA BAY (AS).

DEPTH RANGE: 2-270 M.

EXTRINSIC DISTRIBUTION: FIJI ISLANDS.

LEMBOS KERGUELENI (STEBBING)

AUTONOE KERGUELENI STEBBING, 1888:1087, PL. 111.
AUTONOE LONGIPES. DELLA VALLE, 1893:405, (IN PART).
LEMBOS KERGUELENI. STEBBING, 1895:207.
LEMBOS KERGUELENI. STEBBING, 1906:598.
LEMBOS KERGUELENI. WALKER, 1909:337, PL. 43, FIG. 6.
LEMBOS KERGUELENI. J.L.BARNARD, 1958B:29.
LEMBOS KERGUELENI. SIVAPRAKASAM, 1966:114, FIG. 13.
LEMBOS KERGUELENI. SURYA RAO, 1974:192.
NOT AUTONOE KERGUELENI. THOMSON, 1902:464, (=LEMBOS SPECIES 1, ACCORDING TO J.L.BARNARD, 1972C).
NOT LEMBOS KERGUELENI. CHILTON, 1909A:646, FIG. 12, (=LEMBOS SPECIES 2, AND LEMBOS SPECIES 3, ACCORDING TO J.L.BARNARD, 1972C).

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS).

EXTRINSIC DISTRIBUTION: INDIA; WASIN.

LEMBOS SPECIES 2

LEMBOS SP. NO. 2 J.L.BARNARD, 1972C:130.
LEMBOS KERGUELENI. CHILTON, 1909A:646, FIG. 12, (IN PART, SPECIMEN FROM CAMPBELL ISLAND ONLY).

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR, 14 M (CC).

LEMBOS SPECIES 3

LEMBOS SP. NO. 3 J.L.BARNARD, 1972C:131.
LEMBOS KERGUELENI. CHILTON, 1909A:646, FIG. 12, (IN PART, SPECIMEN FROM MACQUARIE ISLAND ONLY).

DISTRIBUTION: MACQUARIE ISLAND: (CC).

MICRODEUTOPUS SPECIES

MICRODEUTOPUS SP. STEPHENSEN, 1927:352.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, LOW TIDE (KS).

PHOTIS COECUS J.L.BARNARD

PHOTIS COECUS J.L.BARNARD, 1962A:29, (KEY).
PHOTIS COECUS. J.L.BARNARD, 1962D:72, FIG. 72, TABLES 5,8.

DISTRIBUTION: EAST SCOTIA BASIN: 55 19 S 37 57 W, 3725 M (JLB).

PHOTIS MACROCARPA STEBBING

PHOTIS MACROCARPUS STEBBING, 1888:1064, PL. 107.
PHOTIS REINHARDI. DELLA VALLE, 1893:395, (IN PART).
PHOTIS MACROCARPA. STEBBING, 1906:607, FIG. 103.
PHOTIS MACROCARPA. J.L.BARNARD, 1958B:115.

DISTRIBUTION: KERGUELEN ISLANDS: (TRRS).

+ + + + + + + + + + + +

DEXAMINIDAE

(=ATYLIDAE, LEPECHINELLIDAE)

DEXAMININAE

ATYLUS HOMOCHIR DENTATUS (SCHELLENBERG)

NOTOTROPIS HOMOCHIR DENTATUS SCHELLENBERG, 1931:167, FIG. 87, PL. 1, FIGS. H,I2.

DISTRIBUTION: FALKLAND ISLANDS: PORT WILLIAM, 40 M (AS).
MAGELLANIC AREA: LENNOX ISLAND, 18-27 M, LENNOX COVE, 18-36 M; MAGELLAN SOUND (AS).

DEPTH RANGE: 18-40 M.

ATYLUS VILLOSUS BATE

ATYLUS VILLOSUS BATE, 1862:135, PL. 26, FIG. 1.
ATYLUS SWAMMERDAMII. DELLA VALLE, 1893:698, (IN PART).
NOTOTROPIS VILLOSUS. STEBBING, 1906:334.
? NOTOTROPIS VILLOSUS. SCHELLENBERG, 1931:168, FIG. 88, PL. 1, FIG. I1.
NOTOTROPIS VILLOSUS. K.H.BARNARD, 1932:184, FIG. 113.
NOTOTROPIS VILLOSUS FORM DENTATE K.H.BARNARD, 1932:185.
NOTOTROPIS VILLOSUS. SCHELLENBERG, 1935:232.
ATYLUS VILLOSUS. J.L.BARNARD, 1958B:31.
ATYLUS VILLOSUS. BELLAN-SANTINI AND LEDOYER, 1974:646, PL. 4.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, HOSKYN ISLAND, 120-140 M (BS&L).
MAGELLANIC AREA: HERMITE ISLAND (CSB), 30-35 M (KHB); LENNOX COVE (AS); ARENAS POINT, 21-23 M (KHB).

DEPTH RANGE: 21-140 M.

EXTRINSIC DISTRIBUTION: CHILE; SOUTH ATLANTIC OCEAN.

LEPECHINELLA CACHI J.L.BARNARD

LEPECHINELLA CACHI J.L.BARNARD, 1973B:12, FIG. 4.

DISTRIBUTION: DRAKE PASSAGE: 56 02 S 61 56 W, 4008 M; 55 44 S 64 11 W, 3777 M; 57 04 S 61 25 W, 3987 M (JLB).

DEPTH RANGE: 3777-4008 M.

LEPECHINELLA CETRATA K.H.BARNARD

LEPECHINELLA CETRATA K.H.BARNARD, 1932:186, FIG. 114.
LEPICHINELLA CETRATA. J.L.BARNARD, 1957:17, (KEY).
LEPECHINELLA CETRATA. J.L.BARNARD, 1958B:86.
LEPICHINELLA CETRATA. J.L.BARNARD, 1961:99, (KEY).
LEPECHINELLA CETRATA. J.L.BARNARD, 1973B:14.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

LEPECHINELLA DRYGALSKII SCHELLENBERG

LEPECHINELLA DRYGALSKII SCHELLENBERG, 1926A:345, FIG. 50.
LEPECHINELLA DRYGALSKII. NICHOLLS, 1938:97.
LEPECHINELLA DRYGALSKYI. RUFFO, 1949:32, FIGS. 9,10.
LEPICHINELLA DRYGALSKII. J.L.BARNARD, 1957:17, (KEY).
LEPECHINELLA DRYGALSKII. J.L.BARNARD, 1958B:86.
LEPICHINELLA DRYGALSKII. J.L.BARNARD, 1961:99, (KEY).
LEPECHINELLA DRYGALSKII. J.L.BARNARD, 1973B:16.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
BELLINGSHAUSEN SEA: 71 19 S 87 37 W (SR).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).

DEPTH RANGE: 385-540 M.

LEPECHINELLA HUACO J.L.BARNARD

LEPECHINELLA HUACO J.L.BARNARD, 1973B:17, FIG. 6.

DISTRIBUTION: DRAKE PASSAGE: 55 00 S 58 57 W, 2452 M (JLB).

PARADEXAMINE FISSICAUDA CHEVREUX

PARADEXAMINE FISSICAUDA CHEVREUX, 1906C:82, FIGS. 1,2.
PARADEXAMINE FISSICAUDA. CHEVREUX, 1906E:88, FIGS. 51-53.
PARADEXAMINE PACIFICA. CHILTON, 1912:501.
PARADEXAMINE FISSICAUDA. CHEVERUX, 1913:181.
PARADEXAMINE PACIFICA. CHILTON, 1925A:179.
PARADEXAMINE FISSICAUDA. SCHELLENBERG, 1931:210.
PARADEXAMINE FISSICAUDA. K.H.BARNARD, 1932:217.
PARADEXAMINE FISSICAUDA. SHEARD, 1938:176,185, (KEY).
PARADEXAMINE FISSICAUDA. STEPHENSEN, 1938:241.
PARADEXAMINE FISSICAUDA. STEPHENSEN, 1947:66.
PARADEXAMINE FISSICAUDA. J.L.BARNARD, 1958B:39.
PARADEXAMINE FISSICAUDA. BELLISIO, 1966:52, (NOT PL. 26).
PARADEXAMINE FISSICAUDA. J.L.BARNARD, 1972A:75, FIGS. 34-36.
PARADEXAMINE FISSICAUDA. THURSTON, 1974A:88, FIGS. 35A-I.
PARADEXAMINE FISSICAUDA. THURSTON, 1974B:17.

DISTRIBUTION: PALMER ARCHIPELAGO: NEUMAYER CHANNEL, 60-129 M (EC); PORT LOCKROY, 9-30 M (KS), LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
SOUTH GEORGIA: CUMBERLAND BAY, 10-15 M; MORAINE FJORD, 70 M; OFF GRYTVIKEN, 2-30 M (AS); CUMBERLAND EAST BAY, 17-40 M (KHB); GODTHUL BAY, 55 M; 'HYSTADHULLET', 10-40 M; HOUND BAY, 18 M; CUMBERLAND WEST BAY, JASON HARBOUR, 20 M (KS).
SOUTH ORKNEY ISLANDS: 4-18 (CC); SIGNY ISLAND, BORGE BAY, 1-20 M, PAAL HARBOUR, 5-49 M (MHT).
TRINITY PENINSULA: HOPE BAY, 37-73 M (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND, 20-25 M; 'CARTHAGE BAY', 40 M; PORT CHARCOT, 40 M; PETERMANN ISLAND, 40-70 M; LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: 1-129 M.

PARADEXAMINE NANA STEBBING

PARADEXAMINE NANUS STEBBING, 1914:366.
PARADEXAMINE NANA. SCHELLENBERG, 1931:210.
PARADEXAMINE NANA. SHEARD, 1938:176,185, (KEY).
PARADEXAMINE NANA. J.L.BARNARD, 1958B:39.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 27-72 M; PORT WILLIAM, 40-72 M; PORT LOUIS, 2 M (AS); PORT STANLEY (TRRS).
MAGELLANIC AREA: PUERTO CONDOR, 90 M; LENNOX COVE, 18-36 M (AS).

DEPTH RANGE: 2-90 M.

PARADEXAMINE PACIFICA (THOMSON)

DEXAMINE PACIFICA THOMSON, 1879A:238, PL. 10, FIG. B4.
DEXAMINE PACIFICA. THOMSON AND CHILTON, 1886:149.
DEXAMINE PACIFICA. THOMSON, 1889:262.
DEXAMINE SPINOSA. DELLA VALLE, 1893:574, (IN PART).
PARADEXAMINE PACIFICA. STEBBING, 1899D:210.
PARADEXAMINE PACIFICA. HUTTON, 1904:259.
PARADEXAMINE PACIFICA. STEBBING, 1906:518.
PARADEXAMINE PACIFICA. CALMAN, 1908:233.
PARADEXAMINE PACIFICA. CHILTON, 1909A:632.
PARADEXAMINE PACIFICA. STEBBING, 1910A:644.
PARADEXAMINE PACIFICA. CHILTON, 1911A:308.
PARADEXAMINE PACIFICA. THOMSON, 1913:243.
PARADEXAMINE PACIFICA. STEPHENSEN, 1927:345, FIGS. 21,22.
PARADEXAMINE PACIFICA. SCHELLENBERG, 1931:209.
PARADEXAMINE PACIFICA. SHEARD, 1938:176, FIG. 5, (KEY).
PARADEXAMINE PACIFICA. STEPHENSEN, 1938:246.
PARADEXAMINE PACIFICA. J.L.BARNARD, 1958B:39.
PARADEXAMINE PACIFICA. DAY, ET. AL., 1970:53.
PARADEXAMINE PACIFICA. J.L.BARNARD, 1972A:122, FIGS. 67-69.
PARADEXAMINE PACIFICA. J.L.BARNARD, 1972C:25,60, (KEY).
PARADEXAMINE PACIFICA FORME KERGUELENI BELLAN-SANTINI AND LEDOYER, 1974:649, PL. 5.
PARADEXAMINE PACIFICA. LOWRY, 1974:106,123, (KEY).
NOT PARADEXAMINE PACIFICA. CHILTON, 1912:501, (=PARADEXAMINE FISSICAUDA).
NOT PARADEXAMINE PACIFICA. CHILTON, 1925A:179, (=PARADEXAMINE FISSICAUDA).
NOT PARADEXAMINE PACIFICA. K.H.BARNARD, 1930:389, FIGS. 49A-C, (=PARADEXAMINE BARNARDI).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, 4 M (CC); PORT ROSS, 19 M (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, 19-38 M (KS).
KERGUELEN ISLANDS: MORBIHAN BAY, 15 M (BS&L).

DEPTH RANGE: 4-38 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; NEW ZEALAND; SOUTH AFRICA; SOUTH AMERICA.

PARADEXAMINE SEXDENTATA SCHELLENBERG

PARADEXAMINE SEXDENTATA SCHELLENBERG, 1931:211, FIG. 106.
PARADEXAMINE SEXDENTATA. SHEARD, 1938:176,185, (KEY).
PARADEXAMINE SEXDENTATA. J.L.BARNARD, 1958B:39.

DISTRIBUTION: SOUTH GEORGIA: OFF GRYTVIKEN, 12-50 M; CUMBERLAND BAY, 250-310 M (AS).

DEPTH RANGE: 12-310 M.

POLYCHERIA ANTARCTICA (STEBBING)

DEXAMINE ANTARCTICA STEBBING, 1875:185, PL. 15A, FIG. 1.
ATYLUS ANTARCTICUS. STEBBING, 1878:370.
POLYCHERIA TENUIPES HASWELL, 1880A:345, PL. 22, FIG. 8.
POLYCHERIA BREVICORNIS HASWELL, 1880A:346.
POLYCHERIA BREVICORNIS. HASWELL, 1882:262.
POLYCHERIA TENUIPES. HASWELL, 1882:262.
POLYCHERIA OBTUSA THOMSON, 1882:233, PL. 17, FIG. 3.
TRITAETA ANTARCTICA. STEBBING, 1888:451,513,941.
TRITAETA KERGUELENI STEBBING, 1888:941, PL. 83.
TRITAETA TENUIPES. STEBBING, 1888:945.
POLYCHERIA ANTARCTICA. DELLA VALLE, 1893:580, PL. 58, FIGS. 83,84.

? TRITAETA ANTARCTICA. WALKER, 1904:266, PL. 4, FIG. 25.
POLYCHERIA ANTARCTICA. STEBBING, 1906:520, FIGS. 90,91.
POLYCHERIA TENUIPES. STEBBING, 1906:520.
POLYCHERIA ANTARCTICA. WALKER, 1907:34.
POLYCHERIA ANTARCTICA. STEBBING, 1910A:644.
POLYCHERIA ANTARCTICA. CHILTON, 1912:502.
POLYCHERIA ANTARCTICA. CHILTON, 1913:62.
POLYCHERIA ANTARCTICA. CHILTON, 1921B:77.
POLYCHERIA ANTARCTICA. SCHELLENBERG, 1926A:370, FIG. 58.
POLYCHERIA ANTARCTICA. HALE, 1929:216, FIG. 214.
POLYCHERIA ANTARCTICA. K.H.BARNARD, 1930:390,450, FIG. 49D.
POLYCHERIA ANTARCTICA. SCHELLENBERG, 1931:214.
POLYCHERIA ANTARCTICA F. CRISTATA SCHELLENBERG, 1931:215.
POLYCHERIA ANTARCTICA F. KERGUELENI. SCHELLENBERG, 1931:215.
POLYCHERIA ANTARCTICA F. GRACILIPES SCHELLENBERG, 1931:216, FIGS. 107B, 108.
POLYCHERIA ANTARCTICA F. DENTATA SCHELLENBERG, 1931:217, FIGS. 107A,109.
POLYCHERIA ANTARCTICA F. SIMILIS SCHELLENBERG, 1931:218, FIGS. 107C,110.
POLYCHERIA ANTARCTICA F. BIDENS SCHELLENBERG, 1931:218, FIGS. 107D,111.
POLYCHERIA ANTARCTICA F. MACROPHTHALMA SCHELLENBERG, 1931:220, FIGS. 107E, 112.
POLYCHERIA ANTARCTICA F. TENUIPES. SCHELLENBERG, 1931:221, FIGS. 107F,G.
POLYCHERIA ANTARCTICA. K.H.BARNARD, 1932:217.
POLYCHERIA ANTARCTICA. NICHOLLS, 1938:123.
POLYCHERIA ANTARCTICA. PIRLOT, 1938:329.
POLYCHERIA ANTARCTICA F. INTERMEDIA STEPHENSEN, 1947:66, FIG. 21.
POLYCHERIA ANTARCTICA. J.L.BARNARD, 1958B:39.
POLYCHERIA ANTARCTICA. BELLAN-SANTINI, 1972A:184.
POLYCHEIRA ANTARCTICA CF F. TENUIPES. SANDERSON, 1973:10.
POLYCHERIA ANTARCTICA. BELLAN-SANTINI AND LEDOYER, 1974:649.
POLYCHERIA ANTARCTICA F. GRACILIPES. THURSTON, 1974A:90, FIGS. 35J,K.
POLYCHERIA ANTARCTICA F. GRACILIS (SIC). THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. SIMILIS. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. KERGUELENI. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. DENTATA. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. INTERMEDIA. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. CRISTATA. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. ANTARCTICA. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. MACROPHTHALMA. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. BIDENS. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. TENUIPES. THURSTON, 1974B:18, (KEY).
POLYCHERIA ANTARCTICA F. ACANTHOPODA THURSTON, 1974B:18, FIG. 5, (KEY).
NOT ATYLUS ANTARCTICUS WALKER, 1903A:58, PL. 11, FIGS. 91-97, (=PARAMOERA WALKERI).
NOT TRITAETA ANTARCTICA. HUTTON, 1904:259, (=POLYCHERIA OBTUSA).
NOT POLYCHERIA ANTARCTICA. K.H.BARNARD, 1916:211, (=POLYCHERIA ATOLLI).
NOT POLYCHERIA ANTARCTICA. ALDERMAN, 1936:63, (=POLYCHERIA OSBORNI).
NOT POLYCHERIA ANTARCTICA. J.L. BARNARD, 1954B:21, (=POLYCHERIA OSBORNI).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45 M (GEN); CAPE GEODESIE, SURFACE (DBS).
FALKLAND ISLANDS: BERKELEY SOUND, 16 M; 53 41 S 61 09 W, 140-150 M (AS); EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).
KERGUELEN ISLANDS: (KS); CUMBERLAND BAY, 229 M; ROYAL SOUND, 50 M (TRRS), (AS); OBSERVATORY BAY (AS); MORBIHAN BAY, LOW TIDE-108 M, CHAT ISLAND, AUSTRALIA ISLAND, 24 M, LABOUREUR SOUND, 10-61 M, SUHM ISLAND, 90-106 M, JOLIETTE COVE, 10-54 M, HOSKYN ISLAND, 120-140 M; PORT JEANNE-D'ARC, 14-17 M; POINT MOLLOY, LOW TIDE; BOSSIERE FJORD, 0-25 M (BS&L).
MAGELLANIC AREA: ULTIMA ESPERANZA, 13-18 M; 52 20 S 67 39 W, 99 M (AS).
ROSS SEA: WINTER QUARTERS BAY (AOW); 77 30 S 175 00 E, 540 M (TRRS); CAPE ROYDS, 110-146 M (KHB).
SOUTH GEORGIA: OFF GRYTVIKEN, 22-30 M; CUMBERLAND BAY, 75-310 M (AS); CUMBERLAND EAST BAY, 7-273 M; STROMNESS HARBOUR, 155-178 M; 53 55 S 38 01 W, 107 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC); SIGNY ISLAND, BORGE BAY, 1-10 M, PAAL HARBOUR, 5-15 M (MHT).
TRINITY PENINSULA: HOPE BAY, 73-91 M (MHT).

DEPTH RANGE: SURFACE-540 M.

EXTRINSIC DISTRIBUTION: ARGENTINA; AUSTRALIA; NEW ZEALAND; SOUTH AFRICA.

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EOPHLIANTIDAE

CYLINDRYLLIOIDES MAWSONI NICHOLLS

CYLINDRYLLIOIDES MAWSONI NICHOLLS, 1938:59, FIGS. 30,31.
CYLINDRYLLIOIDES MAWSONI. NICHOLLS, 1939:333.
CYLINDRYLLIOIDES MAWSONI. J.L.BARNARD, 1958B:126.
CYLINDRYLLIOIDES MAWSONI. J.L.BARNARD, 1964C:56.
CYLINDRYLLIOIDES MAWSONI. J.L.BARNARD, 1972C:183.
CYLINDRYLLIOIDES MAWSONI. BELLAN-SANTINI AND LEDOYER, 1974:649, PL. 6.

DISTRIBUTION: CROZET ISLANDS: EAST ISLAND, ADVENTURE BAY (BS&L).
KERGUELEN ISLANDS: MORBIHAN BAY, PORT DOUZIEME, LITTORAL; PORT AUX FRANCAIS, 2 M (BS&L).
MACQUARIE ISLAND: (GEN).

DEPTH RANGE: LITTORAL-2 M.

WANDELIA CRASSIPES CHEVREUX

WANDELIA CRASSIPES CHEVREUX, 1906D:87, FIGS. 1,2.
WANDELIA CRASSIPES. CHEVREUX, 1906E:45, FIGS. 24-26.
BIRCENNA CRASSIPES. CHILTON, 1909B:62.
BIRCENNA CRASSIPES. CHILTON, 1912:484.
BIRCENNA CRASSIPES. CHEVREUX, 1913:113.
BIRCENNA CRASSIPES. SHEARD, 1936:460, (KEY).
WANDELIA CRASSIPES. NICHOLLS, 1939:324.
BIRCENNA CRASSIPES. STEPHENSEN, 1947:49.
? BIRCENNA CRASSIPES. STEPHENSEN, 1949:14, FIG. 4, (QUESTIONED BY THURSTON, 1974A).
BIRCENNA CRASSIPES. J.L.BARNARD, 1958B:126.
WANDELIA CRASSIPES. J.L.BARNARD, 1964C:56.
WANDELIA CRASSIPES. J.L.BARNARD, 1972C:187.
WANDELIA CRASSIPES. THURSTON, 1974A:28, FIG. 10H.
WANDELIA CRASSIPES. THURSTON, 1974B:20.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, 18 M, GOUDIER ISLAND, 1 M (MHT).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, BORGE BAY, 2-10 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 25 M (KS).
WILHELM ARCHIPELAGO: PORT CHARCOT, 40 M; BOOTH ISLAND, 20-40 M; PETERMANN ISLAND, 3 M (EC).

DEPTH RANGE: 1-40 M.

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EUSIRIDAE

(=CALLIOPIIDAE, PONTOGENEIIDAE)

ANTARCTOGENEIA MACRODACTYLA THURSTON

ANTARCTOGENEIA MACRODACTYLA THURSTON, 1974B:21, FIGS. 6,7.
EUSIRIDAE GEN. ET SP. INDET. THURSTON, 1974A:87, FIGS. 32E-G.

DISTRIBUTION: MARGUERITE BAY: STONINGTON ISLAND, 64 M (MHT).
PALMER ARCHIPELAGO: PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 2-10 M (MHT).

DEPTH RANGE: 2-64 M.

ATYLOELLA DENTATA K.H.BARNARD

ATYLOELLA DENTATA K.H.BARNARD, 1932:202, FIGS. 118E,122.
ATYLOELLA DENTATA. J.L.BARNARD, 1958B:123.
ATYLOELLA DENTATA. BELLAN-SANTINI AND LEDOYER, 1974:652.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, OFF EDDYSTONE ROCK, 105-115 M (KHB).
MAGELLANIC AREA: 51 01 S 64 59 W, 131-132 M (KHB).

DEPTH RANGE: 105-132 M.

ATYLOELLA MAGELLANICA (STEBBING)

ATYLOPSIS MAGELLANICUS STEBBING, 1888:925, PL. 79.
ATYLUS MAGELLANICUS. DELLA VALLE, 1893:701.
PONTOGENEIA MAGELLANICA. STEBBING, 1906:360.
? ATYLOIDES MAGELLANICUS. STEBBING, 1914:365, (QUESTIONED BY SCHELLENBERG, 1926A; NICHOLLS, 1938).
ATYLOIDES MAGELLANICA. SCHELLENBERG, 1926A:360, FIG. 55.
ATYLOIDES MAGELLANICUS. STEPHENSEN, 1927:325.
ATYLOELLA MAGELLANICA. SCHELLENBERG, 1929A:279.
ATYLOELLA MAGELLANICA. SCHELLENBERG, 1931:191.
ATYLOELLA MAGELLANICA. K.H.BARNARD, 1932:201, FIG. 118G.
ATYLOELLA MAGELLANICA. SCHELLENBERG, 1935:232.
ATYLOELLA MAGELLANICA. NICHOLLS, 1938:110.
ATYLOELLA MAGELLANICA. STEPHENSEN, 1947:63.
ATYLOELLA MAGELLANICA. J.L.BARNARD, 1958B:123.
? PONTOGENEIA MAGALLANICA. CASTELLANOS AND PEREZ, 1963:10, TABLE 5, FIG. 17A, (IN PART, PART =PARAMOERA EDOUARDI, QUESTIONED BY THURSTON, 1974A).
ATYLOELLA MAGELLANICA. BELLAN-SANTINI AND LEDOYER, 1974:652, PL. 7A.
ATYLOELLA MAGELLANICA. THURSTON, 1974A:57.
ATYLOELLA MAGELLANICA. THURSTON, 1974B:24.
NOT PONTOGENEIA MAGELLANICA. CHEVREUX, 1906E:64, FIGS. 37-39, (=PARAMOERA EDOUARDI).
NOT PONTOGENEIA MAGELLANICA. WALKER, 1907:33, PL. 12, FIG. 20, (=PROSTEBBINGIA SERRATA).
NOT ATYLOIDES MAGELLANICA. CHILTON, 1909A:627, (=? PARAMOERA CHEVREUXI).
NOT ATYLOIDES MAGELLANICA. CHILTON, 1912:496, PL. 1, FIG. 18, (PART =PARAMOERA EDOUARDI, GONDOGENEIA ANTARCTICA).
NOT ATYLOIDES MAGELLANICUS. CHEVREUX, 1913:178, (=PARAMOERA EDOUARDI).
NOT ATYLOIDES MAGELLANICA. SHOEMAKER, 1914:75.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-540 M (GEN).
DANCO COAST: SPRING POINT, TIDE POOL (C&P).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
FALKLAND ISLANDS: WHALES BAY (TRRS); EAST FALKLAND ISLAND, PORT WILLIAM, 40 M (AS), SPARROW COVE, 11-16 M; PORT STANLEY, 1-2 M (KHB), 2 M (AS). 53 41 S 61 09 W, 140-150 M; 52 29 S 60 36 W, 197 M (AS).
KERGUELEN ISLANDS: MORBIHAN BAY, 15 M, PORT JEANNE-D'ARC, 14-17 M (BS&L).
MAGELLANIC AREA: CAPE VIRGENES, 99 M (TRRS); BEAGLE CHANNEL, 100 M; NUEVA ISLAND, 14 M; PUNTA ARENAS, 27 M; PORVENIR, 11-18 M; PUERTO HOPE, 11-18 M; CAPE VALENTINA, 270 M; LARGA ISLAND, SMYTH CHANNEL, 14 M; PICTON ISLAND, BANNER COVE, 5 M (AS).
PALMER ARCHIPELAGO: PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, LOW TIDE-18 M (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 1-20 M, PAAL HARBOUR, 5-25 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS).

DEPTH RANGE: TIDE POOL-540 M.

EXTRINSIC DISTRIBUTION: CHILE.

ATYLOELLA QUADRIDENS (K.H.BARNARD)

ATYLOIDES QUADRIDENS K.H.BARNARD, 1930:387.
ATYLOELLA QUADRIDENS. SCHELLENBERG, 1931:192, FIG. 98.
ATYLOELLA QUADRIDENS. J.L.BARNARD, 1958B:123.
ATYLOELLA QUADRIDENS. BELLAN-SANTINI AND LEDOYER, 1974:652.

DISTRIBUTION: ROSS SEA: MCMURDO SOUND, 457 M (KHB).
TRINITY PENINSULA: SEYMOUR ISLAND (AS).

ATYLOPSIS EMARGINATUS STEBBING

ATYLOPSIS EMARGINATUS STEBBING, 1888:932, PL. 81.
ACANTHONOTOSOMA EMARGINATUM. DELLA VALLE, 1893:678, PL. 59, FIG. 86.
ATYLOPSIS EMARGINATA. STEBBING, 1906:300.
ATYLOPSIS EMARGINATA. J.L.BARNARD, 1958B:32.
ATYLOPSIS EMARGINATUS. THURSTON, 1974A:54, (KEY).

DISTRIBUTION: PRINCE EDWARD ISLANDS: MARION ISLAND, 558 M (TRRS).

ATYLOPSIS MEGALOPS NICHOLLS

ATYLOPSIS MEGALOPS NICHOLLS, 1938:93, FIGS. 49,52A.
LEPTAMPHOPUS NOVAE ZEALANDIAE. SCHELLENBERG, 1926A:351, (IN PART).
ATYLOPSIS MEGALOPS. J.L.BARNARD, 1958B:32.

ORADAREA MEGALOPS. J.L.BARNARD, 1964C:53.
ATYLOPSIS MEGALOPS. J.L.BARNARD, 1969A:173.
ATYLOPSIS MEGALOPS. THURSTON, 1974A:54, (KEY).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 81-90 M (GEN).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).

DEPTH RANGE: 81-385 M.

ATYLOPSIS ORTHODACTYLUS THURSTON

ATYLOPSIS ORTHODACTYLUS THURSTON, 1974B:25, FIGS. 8,9.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).

BOVALLIA GIGANTEA PFEFFER

BOVALLIA GIGANTEA PFEFFER, 1888:96, PL. 1, FIG. 5.
ATYLUS GIGANTEA. DELLA VALLE, 1893:704.
BOVALLIA GIGANTEA. CHEVREUX, 1906E:54, FIGS. 31-33.
BOVALLIA GIGANTEA. STEBBING, 1906:357.
BOVALLIA MONOCULOIDES. CHILTON, 1912:494.
BOVALLIA GIGANTEA. CHEVREUX, 1913:168.
BOVALLIA MONOCULOIDES. CHILTON, 1913:57.
BOVALLIA MONOCULOIDES. SHOEMAKER, 1914:74, (IN PART, PART =EUSIROIDES MONOCULOIDES, AND PARAMOERA WALKERI).
BOVALLIA MONOCULOIDES. CHILTON, 1925A:177.
BOVALLIA GIGANTEA. SCHELLENBERG, 1929A:277.
BOVALLIA GIGANTEA. SCHELLENBERG, 1931:180, FIGS. 92A,B.
BOVALLIA GIGANTEA. K.H.BARNARD, 1932:196,315, FIG. 118A.
BOVALLIA GIGANTEA. STEPHENSEN, 1938:238.
BOVALLIA GIGANTEA. STEPHENSEN, 1947:59.
BOVALLIA GIGANTEA. J.L.BARNARD, 1958B:123.
BOVALLIA GIGANTEA. CASTELLANOS AND PEREZ, 1963:10, TABLE 5.
BOVALLIA GIGANTEA. BELLISIO, 1966:55, PL. 25.
BOVALLIA GIGANTEA. THURSTON, 1968:57-64.
BOVALLIA GIGANTEA. THURSTON, 1970:269, FIG. 1.
BOVALLIA GIGANTEA. BONE, 1972:105-122, FIG. 3.
BOVALLIA GIGANTEA. THURSTON, 1974A:86.
BOVALLIA GIGANTEA. THURSTON, 1974B:28.

DISTRIBUTION: BRANSFIELD STRAIT: 9-27 M (MHT).
DANCO COAST: SPRING POINT, TIDE POOL (C&P).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, MELCHIOR ISLANDS, 4-10 M (KHB); FLANDRES BAY, 2-10 M; PORT LOCKROY, 20-30 M (KS), GOUDIER ISLAND, LOW TIDE-1 M, LECUYER POINT, PELTIER CHANNEL, 18-27 M (MHT).
SOUTH GEORGIA: (GP); (CC); (MHT); MORAINE FJORD, 5 M; CUMBERLAND BAY, OFF GRYTVIKEN, 10 M; STROMNESS HARBOUR, 8 M (AS); LARSEN HARBOUR, DRYGALSKI FJORD, 2 M; CUMBERLAND EAST BAY, 18-26 M; KING EDWARD COVE; CUMBERLAND BAY; LEITH HARBOUR (KHB); CUMBERLAND WEST BAY, JASON HARBOUR, 20-25 M; MAIVIKEN, 15 M; COAL HARBOUR, 14 M; 'HYSTADHULLET', 40 M; HOUND BAY, 10 M (KS); BAY OF ISLES, 9 M; POSSESSION BAY (CRS).
SOUTH ORKNEY ISLANDS: LAURIE ISLAND, SCOTIA BAY (MHT), (CC); SIGNY ISLAND, CAM ROCK, BORGE BAY, 10-12 M (DGB), LITTORAL-20 M, PAAL HARBOUR, 5-49 M, BERNTSEN POINT, LITTORAL-7 M (MHT).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 55-91 M (KS), 55-91 M (MHT); CANDLEMAS ISLANDS (KS), (MHT).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY (EC), KING GEORGE BAY, 10 M (KS); DECEPTION ISLAND, 5-10 M (KHB).
TRINITY PENINSULA: HOPE BAY, HUT COVE, 9 M; GRUNDEN ROCK, LITTORAL (MHT).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, PORT CIRCUMCISION, 5 M (EC); ARGENTINE ISLANDS, GALINDEZ ISLAND, LITTORAL (MHT).

DEPTH RANGE: LITTORAL-91 M.

BOVALLIA SPECIES

BOVALLIA SP. MONOD, 1926:57, FIG. 55.

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 23 S 82 47 W, 480 M (TM).

CHOSROES DECORATUS K.H.BARNARD

CHOSROES DECORATUS K.H.BARNARD, 1932:158, FIG. 92.
CHOSROES ? DECORATUS. STEPHENSEN, 1947:51.
CHOSROES DECORATUS. J.L.BARNARD, 1958B:33.
CHOSROES DECORATUS. J.L.BARNARD, 1969A:219.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB); ELEPHANT ISLAND, 600 M (KS).

DEPTH RANGE: 342-600 M.

CHOSROES INCISUS STEBBING

CHOSROES INCISUS STEBBING, 1888:1209, PLS. 134,135.
ACANTHOZONE INCISA. DELLA VALLE, 1893:614, PL. 59, FIG. 26.
CHOSROES INCISUS. STEBBING, 1906:287.
CHOSROES INCISUS. K.H.BARNARD, 1930:369, FIG. 38.
CHOSROES INCISUS. SCHELLENBERG, 1931:175.
CHOSROES INCISUS. K.H.BARNARD, 1932:157.
CHOSROES INCISUS. J.L.BARNARD, 1958B:33.
CHOSROES INCISUS. J.L.BARNARD, 1969A:219.

DISTRIBUTION: BURDWOOD BANK: 53 45 S 61 10 W, 140-150 M (AS).
FALKLAND ISLANDS: WEST OF FALKLAND ISLANDS, 229 M; EDDYSTONE ROCK, 105-115 M; 50 07 S 57 34 W, 95 M; 51 58 S 65 01 W, 143-145 M (KHB); 52 29 S 60 36 W, 197 M (AS).
MAGELLANIC AREA: OFF CAPE VIRGENES, 51 35 S 65 39 W, 126 M (TRRS); USHUAIA BAY (AS).
SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS).

DEPTH RANGE: 95-229 M.

CLARENCIA CHELATA K.H.BARNARD

CLARENCIA CHELATA K.H.BARNARD, 1931A:428.
CLARENCIA CHELATA. K.H.BARNARD, 1932:156, FIG. 91.
CLARENCIA CHELATA. J.L.BARNARD, 1958B:33.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

CLEONARDO LONGIPES STEBBING

CLEONARDO LONGIPES STEBBING, 1888:959, PL. 86.
PONTOGENEIA LONGIPES. DELLA VALLE, 1893:618, PL. 59, FIG. 31.
CLEONARDO LONGIPES. STEBBING, 1906:347, FIGS. 82,83.
CLEONARDO LONGIROSTRIS CHEVREUX, 1908B:4, FIG. 3, (AS CLEONARDO LONGICORNIS ON FIGURE).
CLEONARDO MICRODACTYLUS STEPHENSEN, 1912A:90, FIGS. 3,4.
CLEONARDO LONGIPES. SCHELLENBERG, 1926B:230.
CLEONARDO MICRODACTYLUS. PIRLOT, 1929:16.
CLEONARDO MICRODACTYLUS. STEPHENSEN, 1933:40.
CLEONARDO LONGIROSTRIS. CHEVREUX, 1935:106.
CLEONARDO MICRODACTYLA. SHOEMAKER, 1945B:195, FIG. 9.
CLEONARDO LONGIPES. SCHELLENBERG, 1955:194.
CLEONARDO LONGIPES. J.L.BARNARD, 1958B:40.
CLEONARDO LONGIROSTRIS. J.L.BARNARD, 1958B:40.
CLEONARDO MICRODACTYLUS. J.L.BARNARD, 1958B:40.
CLEONARDO LONGIPES. BIRSTEIN AND VINOGRADOV, 1962A:50, FIG. 11.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR, 62 55 S 118 52 E, 0-3700 M (B&V); 55 01 S 21 34 E, 0-1500 M (AS).

DEPTH RANGE: 0-3700 M.

EXTRINSIC DISTRIBUITON: JUAN FERNANDEZ ISLANDS; NORTH ATLANTIC OCEAN.

CLEONARDO MACROCEPHALA BIRSTEIN AND VINOGRADOV

CLEONARDO MACROCEPHALA BIRSTEIN AND VINOGRADOV, 1955:273,278, FIGS. 31,32.
CLEONARDO MACROCEPHALA. J.L.BARNARD, 1958B:40.
CLEONARDO MACROCEPHALA. BIRSTEIN AND VINOGRADOV, 1958:247.
CLEONARDO MACROCEPHALA. BIRSTEIN AND VINOGRADOV, 1962A:51, FIG. 12.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR, 62 55 S 118 52 E, 0-3600 M; 64 25 S 92 52 E, 0-2700 M; PACIFIC SECTOR, 63 18 S 135 14 E, 0-3600 M; 64 03 S 161 59 E, 0-3000 M; 58 58 S 109 28 W, 0-2180 M (B&V).

DEPTH RANGE: 0-3600 M.

EXTRINSIC DISTRIBUTION: NORTH PACIFIC OCEAN.

DJERBOA FURCIPES CHEVREUX

DJERBOA FURCIPES CHEVREUX, 1906E:74, FIGS. 42-44.
DJERBOA FURCIPES. CHILTON, 1909A:622.
DJERBOA FURCIPES. CHILTON, 1912:500.
DJERBOA FURCIPES. CHEVREUX, 1913:179, FIG. 60.
DJERBOA FURCIPES. SHOEMAKER, 1914:75.
DJERBOA FURCIPES. SCHELLENBERG, 1926A:363.
DJERBOA FURCIPES. SCHELLENBERG, 1931:193.
DJERBOA FURCIPES. K.H.BARNARD, 1932:203,315, FIG. 118A.
DJERBOA FURCIPES. STEPHENSEN, 1938:239.
DJERBOA FURCIPES. STEPHENSEN, 1947:62.
DJERBOA FURCIPES. J.L.BARNARD, 1958B:123.
DJERBOA FURCIPES. BELLAN-SANTINI AND LEDOYER, 1974:654, PL. 7B.
DJERBOA FURCIPES. THURSTON, 1974A:71.
DJERBOA FURCIPES. THURSTON, 1974B:28.

DISTRIBUTION: CROZET ISLANDS: (BS&L); POSSESSION ISLAND, BEACH (KS).
KERGUELEN ISLANDS: OBSERVATORY BAY (AS).
PALMER ARCHIPELAGO: MELCHIOR ISLANDS, SCHOLLAERT CHANNEL, 4-10 M (KHB); PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
SOUTH GEORGIA: BAY OF ISLES, 9 M (CRS); GODTHUL BAY, 16-55 M; COAL HARBOUR, 19 M; 'HYSTADHULLET', 16 M; CUMBERLAND WEST BAY, JASON HARBOUR, 21 M (KS), 10-15 M (AS); OFF GRYTVIKEN, 5 M; MORAINE FJORD, 16 M (AS); CUMBERLAND EAST BAY, 17-110 M; STROMNESS HARBOUR, 26-35 M; UNDINE HARBOUR, 18-27 M; WILSON HARBOUR, 26-83 M; CUMBERLAND BAY (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 18-27 M (CC); SIGNY ISLAND, BORGE BAY, 4-20 M, PAAL HARBOUR, 5-49 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND (EC); PETERMANN ISLAND, 3 M, PORT CIRCUMCISION, 5 M (EC).

DEPTH RANGE: BEACH-110 M.

EURYMERA MONTICULOSA PFEFFER

EURYMERA MONTICULOSA PFEFFER, 1888:103, PL. 1, FIG. 3.
EURYMERA MONTICULOSA. CHEVREUX, 1906E:59, FIGS. 34-36.
EURYMERA MONTICULOSA. STEBBING, 1906:357.
EURYMERA MONTICULOSA. CHILTON, 1912:493.
EURYMERA MONTICULOSA. CHEVREUX, 1913:167.
EURYMERA MONTICULOSA. CHILTON, 1913:58.
EURYMERA MONTICULOSA. SHOEMAKER, 1914:74.
EURYMERA MONTICULOSA. SCHELLENBERG, 1931:181.
EURYMERA MONTICULOSA. K.H.BARNARD, 1932:198,315, FIG. 118B.
EURYMERA MONTICULOSA. STEPHENSEN, 1938:239.
EURYMERA MONTICULOSA. STEPHENSEN, 1947:59.
EURYMERA MONTICULOSA. J.L.BARNARD, 1958B:123.
EURYMERA MONTICULOSA. CASTELLANOS AND PEREZ, 1963:10, TABLE 5, FIG. 16.
EURYMERA MONTICULOSA. THURSTON, 1974A:84.
EURYMERA MONTICULOSA. THURSTON, 1974B:28.

DISTRIBUTION: BRANSFIELD STRAIT: 63 S, 9-27 M (MHT).
DANCO COAST: SPRING POINT, TIDE POOL (C&P).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, MELCHIOR ISLANDS, 4-10 M (KHB); PORT LOCKROY, FRENCH PASSAGE, 6-40 M (KS), GOUDIER ISLAND, LOW TIDE (MHT).
SOUTH GEORGIA: (GP); BAY OF ISLES, 9 M; POSSESSION BAY (CRS); STROMNESS HARBOUR, INTERTIDAL; CUMBERLAND BAY, INTERTIDAL (AS), 18-27 M (KHB); SAINT ANDREWS BAY; COAL HARBOUR, 0-14 M; GODTHUL BAY, 16 M (KS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 7 M (CC); SIGNY ISLAND, BORGE BAY, LITTORAL-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 5-10 M (KHB).
TRINITY PENINSULA: HOPE BAY, GRUNDEN ROCK, LOW TIDE, JAGGED ROCKS, LOW TIDE (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND; PETERMANN ISLAND (EC).

DEPTH RANGE: INTERTIDAL-40 M.

EUSIROIDES CRASSI STEBBING

EUSIROIDES CRASSI STEBBING, 1888:977, PL. 90.
EUSIROIDES CAESARIS. DELLA VALLE, 1893:672, (IN PART, PART =EUSIROIDES MONOCULOIDES).
EUSIROIDES CRASSI. STEBBING, 1906:346.
EUSIROIDES CRASSI. STEBBING, 1910A:594,639.
EUSIROIDES CRASSI. SCHELLENBERG, 1931:174, FIGS. 92C,D.
EUSIROIDES CRASSI. STEPHENSEN, 1947:58, FIG. 20.
EUSIROIDES CRASSI. J.L.BARNARD, 1958B:40.

DISTRIBUTION: SOUTH GEORGIA: OFF GRYTVIKEN, 12-15 M (AS).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 10-17 M (KS).

DEPTH RANGE: 10-17 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; URUGUAY.

EUSIROIDES GEORGIANUS K.H.BARNARD

EUSIROIDES GEORGIANUS K.H.BARNARD, 1932:191, FIG. 116.
EUSIROIDES GEORGIANUS. J.L.BARNARD, 1958B:40.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 17-110 M; UNDINE HARBOUR, 18-27 M; 53 52 S 36 08 W, 160 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 17-342 M.

EUSIROIDES MONOCULOIDES (HASWELL)

ATYLUS MONOCULOIDES HASWELL, 1880A:327, PL. 18, FIG. 4.
? ATYLUS LIPPUS HASWELL, 1880A:328, PL. 20, FIG. 1.
ATYLUS MONOCULOIDES. HASWELL, 1882:243.
ATYLUS MONOCULOIDES. STEBBING, 1888:969.
EUSIROIDES CAESARIS STEBBING, 1888:970, PL. 88.
EUSIROIDES POMPEII STEBBING, 1888:974, PL. 89.
EUSIROIDES CAESARIS. DELLA VALLE, 1893:672, (IN PART, PART =EUSIROIDES CRASSI).
EUSIROIDES MONOCULOIDES. DELLA VALLE, 1893:674.
? EUSIROIDES CAESARIS. WALKER, 1904:264, PL. 4, FIG. 22, (QUESTIONED BY SCHELLENBERG, 1931).
EUSIROIDES MONOCULOIDES. STEBBING, 1906:345.
? EUSIROIDES MONOCULOIDES. CHEVREUX, 1908A:478, (QUESTIONED BY J.L.BARNARD, 1972C).
? BOVALLIA MONOCULOIDES. CHILTON, 1909A:622, (IN PART, QUESTIONED BY SCHELLENBERG, 1931).
EUSIROIDES MONOCULOIDES. STEBBING, 1910A:595,639.
BOVALLIA MONOCULOIDES. SHOEMAKER, 1914:74, (IN PART, PART =BOVALLIA GIGANTEA, AND PARAMOERA WALKERI).
EUSIROIDES MONOCULOIDES. K.H.BARNARD, 1916:174.
BOVALLIA MONOCULOIDES. CHILTON, 1921B:66.
BOVALLIA MONOCULOIDES. CHILTON, 1924:270.
BOVALLIA MONOCULOIDES. CHILTON, 1925C:109, FIGS. 1-3.
? BOVALLIA MONOCULOIDES. STEPHENSEN, 1927:316, (IN PART).
BOVALLIA MONOCULOIDES. HALE, 1929:211, FIG. 209.
? EUSIROIDES MONOCULOIDES. SCHELLENBERG, 1931:173, FIG. 90, (QUESTIONED BY J.L.BARNARD, 1972C).
EUSIROIDES MONOCULOIDES. STEPHENSEN, 1949:15.
EUSIROIDES MONOCULOIDES. J.L.BARNARD, 1958B:40.
? EUSIROIDES MONOCULOIDES. J.L.BARNARD, 1964D:220,221, FIG. 1, (PROBABLY =EUSIROIDES DELLAVALLEI).
EUSIROIDES MONOCULOIDES. J.L.BARNARD, 1969B:110.
EUSIROIDES MONOCULOIDES. DAY, ET. AL., 1970:52.
EUSIROIDES MONOCULOIDES. J.L.BARNARD, 1972C:28,66, FIGS. 67L,M, (KEY).
EUSIROIDES MONOCULOIDES. GRIFFITHS, 1973:284.
EUSIROIDES MONOCULOIDES. GRIFFITHS, 1974B:232.
EUSIROIDES MONOCULOIDES. GRIFFITHS, 1974C:288.
EUSIROIDES MONOCULOIDES. LOWRY, 1974:109,124, FIG. 8A, (KEY).
NOT BOVALLIA MONOCULOIDES. CHILTON, 1912:494, (=BOVALLIA GIGANTEA).
NOT BOVALLIA MONOCULOIDES. CHILTON, 1913:57, (=BOVALLIA GIGANTEA).
NOT BOVALLIA MONOCULOIDES. CHILTON, 1925A:177, (=BOVALLIA GIGANTEA).
NOT EUSIROIDES MONOCULOIDES. J.L.BARNARD, 1971B:63,64, FIGS. 29E,30E, (=EUSIROIDES DIPLONYX).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR (CC), SHORE (KS); FIGURE OF EIGHT ISLAND (KS).
HEARD ISLAND: 52 59 S 73 33 E, 135 M (TRRS).
MAGELLANIC AREA: MAGELLAN SOUND; BAHIA INUTIL, 36-54 M (AS).
SOUTH GEORGIA: BAY OF ISLES, 9 M; POSSESSION BAY (CRS).

DEPTH RANGE: SHORE-135 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; NEW ZEALAND; SOUTH AFRICA; SRI LANKA; TUAMOTU ARCHIPELAGO.

EUSIROIDES STENOPLEURA K.H.BARNARD

EUSIROIDES STENOPLEURA K.H.BARNARD, 1932:192, FIG. 117, PL. 1, FIG. 4.
EUSIROIDES STENOPLEURA. J.L.BARNARD, 1958B:40.
EUSIROIDES STENOPLEURA. BIRSTEIN AND VINOGRADOV, 1962A:49, FIG. 10.

DISTRIBUTION: BOUVET ISLAND: 52 25 S 09 50 E, 1310-1410 M (KHB).
SOUTHERN OCEAN: PACIFIC SECTOR, 64 03 S 161 59 E, 0-3100 M (B&V).

DEPTH RANGE: 0-3100 M.

EXTRINSIC DISTRIBUTION: SOUTH INDIAN OCEAN; SOUTH WEST ATLANTIC OCEAN.

EUSIRUS ANTARCTICUS THOMSON

EUSIRUS CUSPIDATUS VAR. ANTARCTICUS THOMSON, 1880A:4.
EUSIRUS CUSPIDATUS VAR. ANTARCTICUS. THOMSON, 1880B:216.
EUSIRUS CUSPIDATUS, VAR. ANTARCTICUS. THOMSON AND CHILTON, 1886:148.
EUSIRUS LONGIPES. STEBBING, 1888:965, PL. 87.
EUSIRUS CUSPIDATUS VAR. ANTARCTICUS. DELLA VALLE, 1893:67.
EUSIRUS LONGIPES. THOMSON, 1902:464.
EUSIRUS LATICARPUS CHEVREUX, 1906E:49, FIGS. 27-29 ONLY, (IN PART, MALE =EUSIRUS BOUVIERI).
EUSIRUS ANTARCTICUS. STEBBING, 1906:340, FIG. 79.
EUSIRUS PROPINQUUS. WALKER, 1907:30, (IN PART, PART =EUSIRUS MICROPS).
EUSIRUS ANTARCTICUS. CHILTON, 1912:490.
EUSIRUS LATICARPUS. CHEVREUX, 1913:167.
EUSIRUS ANTARCTICUS. SCHELLENBERG, 1926A:348.
EUSIRUS ANTARCTICUS. SCHELLENBERG, 1926B:195.
EUSIRUS ANTARCTICUS. K.H.BARNARD, 1930:384,450, FIGS. 46A,B.
EUSIRUS ANTARCTICUS. SCHELLENBERG, 1931:171.
EUSIRUS ANTARCTICUS FORMA WALKERI SCHELLENBERG, 1931:171.
EUSIRUS ANTARCTICUS FORMA TYPICA SCHELLENBERG, 1931:171.
EUSIRUS ANTARCTICUS. K.H.BARNARD, 1932:188.
EUSIRUS ANTARCTICUS. NICHOLLS, 1938:98.
EUSIRUS ANTARCTICUS. STEPHENSEN, 1947:57, (IN PART, PART =EUSIRUS BOUVIERI).
EUSIRUS ANTARCTICUS. J.L.BARNARD, 1958B:41.
EUSIRUS ANTARCTICUS. J.L.BARNARD, 1961:97, (KEY).
EUSIRUS ANTARCTICUS. BIRSTEIN AND VINOGRADOV, 1962A:49.
EUSIRUS ANTARCTICUS. J.L.BARNARD, 1972C:28,68, (KEY).
EUSIRUS ANTARCTICUS. BELLAN-SANTINI, 1972B:686, PLS. 1,2.
EUSIRUS ANTARCTICUS. BELLAN-SANTINI AND LEDOYER, 1974:654, PL. 8.
EUSIRUS TRIDENTATUS BELLAN-SANTINI AND LEDOYER, 1974:654.
EUSIRUS ANTARCTICUS. THURSTON, 1974B:29.

DISTRIBUTION: ADELIE COAST: (DBS); COMMONWEALTH BAY, 5-108 M (GEN).
ALEXANDER ISLAND: 297 M (EC).
BRANSFIELD STRAIT: 63 17 S 54 48 W, 200 M (KHB).
COATS LAND: 72 31 S 19 00 W, 2-1800 M; 74 01 S 22 W, 290 M (CC).
DAVIS SEA: 198 M (GEN); 'GAUSS STATION', 385 M (AS); NEAR HASWELL ISLANDS, 0-450 M (B&V).
FALKLAND ISLANDS: PORT ALBEMARLE, 40 M (AS).
HEARD ISLAND: 52 04 S 71 22 E, 270 M (TRRS).
KERGUELEN ISLANDS: (TRRS); (AS); MORBIHAN BAY, 15 M, PORT JEANNE-D'ARC, 14-17 M, JOLIETTE COVE, 10-54 M; PORT AUX FRANCAIS, 15 M (BS&L).
MAGELLANIC AREA: FORTESCUE BAY; BORJA BAY, 18 M; CAPE VALENTINA, 270 M; MAGELLAN SOUND; SMYTH CHANNEL, 14 M; USHUAIA BAY, 22-27 M; BEAGLE CHANNEL, 100 M; PUERTO HOPE, 11-18 M; HARRIS BAY, 27 M; BAHIA INUTIL, 36-54 M; YORK BAY (AS); 54 00 S 64 57 W, 118 M (KHB).
MARGUERITE BAY: JENNY ISLAND, 200-230 M (EC).
PALMER ARCHIPELAGO: 'GRAHAM REGION', 180 M (AS); SCHOLLAERT CHANNEL, 160-500 M (KHB).
ROSS SEA: WINTER QUARTERS BAY (AOW); CAPE ADARE, 82-92 M; MCMURDO SOUND, 175-547 M; CAPE ROYDS, 110-146 M; 68 37 S 166 14 W, SURFACE (KHB).
SOUTH GEORGIA: OFF GRYTVIKEN, 22 M (AS); CUMBERLAND BAY, 230-250 M; CUMBERLAND EAST BAY, 200-234 M; CUMBERLAND WEST BAY, 110 M; STROMNESS

HARBOUR, 122-136 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, 244-344 M (KHB).
SOUTH SANDWICH ISLANDS: 59 43 S 30 44 W, SURFACE (CC).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).
WILHELM ARCHIPELAGO: ARGENTINE ISLANDS, CAPE TUXEN, LOW TIDE (MHT).

DEPTH RANGE: SURFACE-1800 M.

EXTRINSIC DISTRIBUTION: ARGENTINA; NEW ZEALAND.

EUSIRUS BOUVIERI CHEVREUX

EUSIRUS BOUVIERI CHEVREUX, 1911B:405, FIG. 3.
EUSIRUS LATICARPUS CHEVREUX, 1906E:49, FIG. 30 ONLY, (IN PART, PART =EUSIRUS ANTARCTICUS).
EUSIRUS ANTARCTICUS. STEPHENSEN, 1947:57, (IN PART).
EUSIRUS BOUVIERI. J.L.BARNARD, 1958B:41.
EUSIRUS BOUVIERI. THURSTON, 1974B:30.

DISTRIBUTION: SOUTH SANDWICH ISLANDS: 55-92 M (EC); 57 S 10 W, 100-400 M; VISOKOI ISLAND, 10-15 M (KS), 55-91 M (MHT).
TRINITY PENINSULA: HOPE BAY, 73-91 M (MHT).
WILHELM ARCHIPELAGO: PORT CHARCOT, 40 M (EC).

DEPTH RANGE: 10-400 M.

EUSIRUS LAEVIS WALKER

EUSIRUS LAEVIS WALKER, 1903A:55, PL. 10, FIGS. 70-76.
EUSIRUS LAEVIS. STEBBING, 1906:729.
EUSIRUS LAEVIS. MONOD, 1926:54, FIG. 53.
EUSIRUS LAEVIS. J.L.BARNARD, 1958B:41.
EUSIRUS LAEVIS. J.L.BARNARD, 1961:96, (KEY).

DISTRIBUTION: BELLINGSHAUSEN SEA: 71 15 S 87 27 W (TM).

EUSIRUS MICROPS WALKER

EUSIRUS MICROPS WALKER, 1906C:152.
EUSIRUS PROPINQUUS. WALKER, 1907:30, (IN PART, PART =EUSIRUS ANTARCTICUS).
EUSIRUS MICROPS. WALKER, 1907:31, PL. 11, FIG. 19.
EUSIRUS MICROPS. CHEVREUX, 1913:167.
EUSIRUS MICROPS. SCHELLENBERG, 1926A:350.
EUSIRUS MICROPS. K.H.BARNARD, 1930:385, FIG. 47.
EUSIRUS MICROPS. K.H.BARNARD, 1932:191.
EUSIRUS MICROPS. STEPHENSEN, 1947:57.
EUSIRUS MICROPS. RUFFO, 1949:38, FIGS. 11,12.
EUSIRUS MICROPS. J.L.BARNARD, 1958B:41.
EUSIRUS MICROPS. J.L.BARNARD, 1961:97, (KEY).
EUSIRUS MICROPS. DEARBORN, 1967:45.
EUSIRUS MICROPS. EMISON, 1968:202, FIG. 12, TABLES 10-12.
EUSIRUS MICROPS. BELLAN-SANTINI, 1972A:186.
EUSIRUS MICROPS. BELLAN-SANTINI, 1972B:687, PL. 3.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 60-90 M, CAPE GEODESIE, 120-240 M (DBS).
BELLINGSHAUSEN SEA: 70 48 S 91 54 W (SR).
BOUVET ISLAND: 50 30 S 05 34 E, 1310-1410 M (KHB).
BRANSFIELD STRAIT: 64 48 S 60 05 W, 0-5 M (KHB).
DAVIS SEA: 'GAUSS STATION', 50-385 M (AS).
PETER I ISLAND: 330 M (KS).
ROSS SEA: MCMURDO SOUND, 100 M (JHD), WINTER QUARTERS BAY, 18 M (AOW); CAPE CROZIER; BEAUFORT ISLAND (WBE).
WILHELM ARCHIPELAGO: PETERMANN ISLAND (EC).

DEPTH RANGE: 0-1410 M.

EUSIRUS PERDENTATUS CHEVREUX

EUSIRUS PERDENTATUS CHEVREUX, 1912:217.
EUSIRUS SPLENDIDUS CHILTON, 1912:492, PL. 2, FIG. 20.
EUSIRUS PERDENTATUS. CHEVREUX, 1913:163, FIGS. 50-52.
EUSIRUS PERDENTATUS. SCHELLENBERG, 1926A:350.
EUSIRUS PERDENTATUS. K.H.BARNARD, 1930:386, FIG. 46C.

EUSIRUS PERDENTATUS. SCHELLENBERG, 1931:172.
EUSIRUS PERDENTATUS. K.H.BARNARD, 1932:189, FIG. 115.
EUSIRUS PERDENTATUS. NICHOLLS, 1938:98.
EUSIRUS PERDENTATUS. STEPHENSEN, 1947:57.
EUSIRUS PERDENTATUS. RUFFO, 1949:35, FIGS. 11,12.
EUSIRUS PERDENTATUS. DAHL, 1954:292.
EUSIRUS PERDENTATUS. J.L.BARNARD, 1958B:41.
EUSIRUS PERDENTATUS. J.L.BARNARD, 1961:96, (KEY).
EUSIRUS PERDENTATUS. DEARBORN, 1967:45.
EUSIRUS PERDENTATUS. EMISON, 1968:202, FIG. 12, TABLES 10-12.
EUSIRUS PERDENTATUS. BELLAN-SANTINI, 1972A:186.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 108-720 M (GEN); GEOLOGIE ARCHIPELAGO, 70-90 M; CAPE GEODESIE, 150-250 M (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
OATES COAST: 329-366 M (KHB).
PALMER ARCHIPELAGO: PORT LOCKROY, 60-70 M (EC), 90 M (KS); SCHOLLAERT CHANNEL, 160-335 M, GAND ISLAND, 160 M; ANVERS ISLAND, FOURNIER BAY, 295 M; BISMARCK STRAIT, 90-130 M (KHB).
ROSS SEA: (ED); MCMURDO SOUND, 500 M (JHD), 348-547 M (KHB); CAPE CROZIER; BEAUFORT ISLAND (WBE).
SOUTHERN OCEAN: INDIAN SECTOR, 65 18 S 80 27 E, 0-2000 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 97 M (CC); SIGNY ISLAND, 244-344 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).
WEDDELL SEA: 65 19 S 56 48 W, 400 M (AS).

DEPTH RANGE: 0-2000 M.

GONDOGENEIA ANTARCTICA (CHEVREUX)

PONTOGENEIA ANTARCTICA CHEVREUX, 1906B:79, FIG. 2.
PONTOGENEIA ANTARCTICA. CHEVREUX, 1906E:69, FIGS. 40,41.
ATYLOIDES MAGELLANICA. CHILTON, 1912:496, PL. 1, FIG. 18, (IN PART, PART =PARAMOERA EDOURDI).
PONTOGENEIA ANTARCTICA. CHILTON, 1912:496.
PONTOGENEIA ANTARCTICA. CHEVREUX, 1913:177, FIG. 59.
PONTOGENEIA ANTARCTICA. CHILTON, 1925A:178.
PONTOGENEIA ANTARCTICA. SCHELLENBERG, 1931:185.
PONTOGENEIA ANTARCTICA. K.H.BARNARD, 1932:199, FIG. 118H.
PONTOGENEIA ANTARCTICA. STEPHENSEN, 1947:60.
PONTOGENEIA ANTARCTICA. RUFFO, 1949:47, FIGS. 14-16, (IN PART, PART =GONDOGENEIA SPECIES 3).
PONTOGENEIA ANTARCTICA. J.L.BARNARD, 1958B:124.
PONTOGENEIA ANTARCTICA. CASTELLANOS AND PEREZ, 1963:10, TABLE 5, FIG. 17B.
PONTOGENEIA ANTARCTICA. BELLISIO, 1966:52, (NOT PL. 26).
GONDOGENEIA ANTARCTICA. J.L.BARNARD, 1972A:191.
PONTOGENEIA ANTARCTICA. BELLAN-SANTINI AND LEDOYER, 1974:658.
PONTOGENEIA ANTARCTICA. THURSTON, 1974A:79, FIGS. 32A,B.
GONDOGENEIA ANTARCTICA. THURSTON, 1974B:31, FIG. 10.
NOT PONTOGENEIA ANTARCTICA. CHILTON, 1909A:624, (=GONDOGENEIA SPECIES 4).
NOT PONTOGENEIA ANTARCTICUS. STEBBING, 1914:364.
NOT PONTOGENEIA ANTARCTICA. STEPHENSEN, 1927:319, FIGS. 10,11, (=GONDOGENEIA SUBANTARCTICA).

DISTRIBUTION: DANCO COAST: SPRING POINT, TIDE POOL (C&P).
FALKLAND ISLANDS: PORT LOUIS (AS).
MAGELLANIC AREA: NUEVA ISLAND, 54 M; LENNOX ISLAND (AS).
MARGUERITE BAY: STONINGTON ISLAND, LITTORAL (MHT).
PALMER ARCHIPELAGO: FLANDRES BAY (EC), 2-10 M (KS); MELCHIOR ISLANDS, SCHOLLAERT CHANNEL, 4-10 M (KHB); GERLACHE STRAIT, AUGUSTE ISLAND, TWO HUMMOCK ISLAND (SR); PORT LOCKROY, 6-40 M (KS), GOUDIER ISLAND, LOW TIDE-1 M, LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
SOUTH GEORGIA: (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, SHORE (CC); SIGNY ISLAND, PAAL HARBOUR, SHORE (KHB), 5-15 M (MHT), BORGE BAY, LITTORAL-20 M, BERNTSEN POINT, LITTORAL (MHT).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY (EC); DECEPTION ISLAND (MHT), 6-25 M (KS).
TRINITY PENINSULA: CAPE ROQUEMAUREL; PAULET ISLAND, 100-150 M; SEYMOUR ISLAND (AS); HOPE BAY, GRUNDEN ROCK, LOW TIDE (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND; PETERMANN ISLAND, 6 M (EC); ARGENTINE ISLANDS, SKUA ISLAND, LITTORAL, GALINDEZ ISLAND, LITTORAL, RASMUSSEN ISLAND, LITTORAL, CAPE TUXEN, LITTORAL, WEST OF CHAVEZ ISLAND, LITTORAL (MHT).

DEPTH RANGE: LITTORAL-150 M.

GONDOGENEIA BIDENTATA (STEPHENSEN)

PONTOGENEIA BIDENTATA STEPHENSEN, 1927:322, FIG. 12.
PONTOGENEIA BIDENTATA. J.L.BARNARD, 1958B:124.
GONDOGENEIA BIDENTATA. J.L.BARNARD, 1972A:191.
GONDOGENEIA BIDENTATA. J.L.BARNARD, 1972C:87.
PONTOGENEIA BIDENTATA. BELLAN-SANTINI AND LEDOYER, 1974:659.

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR, SHORE (KS).

GONDOGENEIA CHOSROIDES (NICHOLLS)

PONTOGENEIA CHOSROIDES NICHOLLS, 1938:101, FIGS. 52B,53.
PONTOGENEIEA CHOSROIDES VAR. DENTICULATA NICHOLLS, 1938:104, FIG. 54.
PONTOGENEIA CF. CHOSROIDES. EALEY, 1954:205,208.
PONTOGENEIA CHOSROIDES. J.L.BARNARD, 1958B:124.
PONTOGENEIA CHOSROIDES. J.L.BARNARD, 1972A:186.
GONDOGENEIA CHOSROIDES. J.L.BARNARD, 1972C:87.
GONDOGENEIA CHOSROIDES VAR. DENTICULATA. J.L.BARNARD, 1972C:87.
PONTOGENEIA CHOSROIDES. BELLAN-SANTINI AND LEDOYER, 1974:659.

DISTRIBUTION: HEARD ISLAND: (EHME).
MACQUARIE ISLAND: GARDEN BAY, LOW TIDE; NORTH END, LOW TIDE; SOUTH EAST HARBOUR (GEN).

GONDOGENEIA GEORGIANA (PFEFFER)

CALLIOPIUS GEORGIANUS PFEFFER, 1888:116, PL. 2, FIG. 6.
ATYLUS GEORGIANUS. DELLA VALLE, 1893:704.
APHERUSA GEORGIANA. STEBBING, 1906:308.
APHERUSA GEORGIANA. CHILTON, 1913:59.
APHERUSA GEORGIANA. SHOEMAKER, 1914:75.
PONTOGENEIA GEORGIANA. SCHELLENBERG, 1931:184, FIG. 94.
PONTOGENEIA GEORGIANA. K.H.BARNARD, 1932:198, FIGS. 118H,119.
? PONTOGENEIA GEORGIANA. STEPHENSEN, 1938:239.
PONTOGENEIA GEORGIANA. SHOEMAKER, 1945A:290.
PONTOGENEIA GEORGIANA. J.L.BARNARD, 1958B:124.
? GONDOGENEIA GEORGIANA. J.L.BARNARD, 1972A:191, (GENERIC STATUS NOT VERIFIED).
PONTOGENEIA GEORGIANA. BELLAN-SANTINI AND LEDOYER, 1974:659.

DISTRIBUTION: PALMER ARCHIPELAGO: MELCHIOR HARBOUR (CRS).
SOUTH GEORGIA: (GP); BAY OF ISLES, 9 M (CRS); CUMBERLAND BAY (AS); CUMBERLAND EAST BAY (KHB); SACRAMENTO BIGHT (KS).

GONDOGENEIA GRACILICAUDA (SCHELLENBERG)

PONTOGENEIA GRACILICAUDA SCHELLENBERG, 1931:186, FIG. 95.
PONTOGENEIA GRACILICAUDA. J.L.BARNARD, 1958B:124.
? GONDOGENEIA GRACILICAUDA. J.L.BARNARD, 1972A:191, (GENERIC STATUS NOT VERIFIED).
PONTOGENEIA GRACILICAUDA. SANDERSON, 1973:11.
PONTOGENEIA GRACILICAUDA. BELLAN-SANTINI AND LEDOYER, 1974:659.

DISTRIBUTION: FALKLAND ISLANDS: CAPE PEMBROKE (AS).
MAGELLANIC AREA: 'KATANUSHUAIA', 18-22 M; PUERTO PANTALON; YORK BAY; USHUAIA BAY (AS).

DEPTH RANGE: 18-22 M.

GONDOGENEIA MACRODON (SCHELLENBERG)

PONTOGENEIA MACRODON SCHELLENBERG, 1931:187, FIG. 96.
PONTOGENEIA MACRODON. J.L.BARNARD, 1958B:124.
? GONDOGENEIA MACRODON. J.L.BARNARD, 1972A:191, (GENERIC STATUS NOT VERIFIED).
PONTOGENEIA MACRODON. BELLAN-SANTINI AND LEDOYER, 1974:659.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS; CAPE PEMBROKE (AS).
MAGELLANIC AREA: LENNOX ISLAND; USHUAIA BAY, LOW TIDE; PUERTO PANTALON, LOW TIDE; DUNGENESS POINT; NUEVA ISLAND, 14 M; MAGELLAN SOUND (AS).

DEPTH RANGE: LOW TIDE-14 M.

GONDOGENEIA REDFEARNI (THURSTON)

PONTOGENEIA REDFEARNI THURSTON, 1974A:81, FIGS. 33A-P,34A-K.
PONTOGENEIA REDFEARNI. BELLAN-SANTINI AND LEDOYER, 1974:661.
GONDOGENEIA REDFEARNI. THURSTON, 1974B:32.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 2-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT).

DEPTH RANGE: 2-20 M.

GONDOGENEIA SIMPLEX (DANA)

IPHIMEDIA SIMPLEX DANA, 1852:217.
IPHIMEDIA SIMPLEX. DANA, 1853-55:927, PL. 63, FIG. 2.
ATYLUS SIMPLEX. BATE, 1862:140, PL. 27, FIG. 2.
AMPHITHOE (IPHIMEDIA) SIMPLEX. DELLA VALLE, 1893:585.
PARAMOERA SIMPLEX. STEBBING, 1906:363.
PONTOGENEIA DANAI. CHILTON, 1912:495.
BOVALLIA CALLIOPIOIDES SCHELLENBERG, 1926A:354, FIG. 52.
PONTOGENEIA SIMPLEX. SCHELLENBERG, 1931:182, FIG. 93.
PONTOGENEIA SIMPLEX. K.H.BARNARD, 1932:198, FIG. 118G.
PONTOGENEIA SIMPLEX. SCHELLENBERG, 1935:232.
PONTOGENEIA SIMPLEX. STEPHENSEN, 1947:60.
PONTOGENEIA SIMPLEX. J.L.BARNARD, 1958B:124.
GONDOGENEIA SIMPLEX. J.L.BARNARD, 1972A:191.
PONTOGENEIA SIMPLEX. SANDERSON, 1973:11.
PONTOGENEIA SIMPLEX. BELLAN-SANTINI AND LEDOYER, 1974:660.

DISTRIBUTION: CROZET ISLANDS: 1-5 M (KS).
FALKLAND ISLANDS: CAPE PEMBROKE (CC); WEST POINT ISLAND (AS); EAST FALKLAND ISLAND, PORT WILLIAM, SPARROW COVE, 11-16 M (KHB).
KERGUELEN ISLANDS: ROYAL SOUND (AS).
MAGELLANIC AREA: 'MARTHA BANK', 180 M; PUNTA ARENAS, LOW TIDE; MAGELLAN SOUND; PUERTO PANTALON, LOW TIDE; CAPE HORN (AS); HERMITE ISLAND (JDD).

DEPTH RANGE: LOW TIDE-180 M.

EXTRINSIC DISTRIBUTION: PERU; SOUTH ATLANTIC OCEAN.

GONDOGENEIA SPINICOXA BELLAN-SANTINI AND LEDOYER

GONDOGENEIA SPINICOXA BELLAN-SANTINI AND LEDOYER, 1974:661, PL. 9.

DISTRIBUTION: CROZET ISLANDS: POSSESSION ISLAND, NAVIRE BAY; EAST ISLAND, ADVENTURE BAY (BS&L).

GONDOGENEIA SUBANTARCTICA (STEPHENSEN)

PONTOGENEIA SUBANTARCTICA STEPHENSEN, 1938:245.
? PARAMOERA AUSTRINA VAR. WALKER, 1908:34, (QUESTIONED BY J.L.BARNARD, 1972C).
? PONTOGENEIA ANTARCTICA. STEPHENSEN, 1927:319, FIGS. 10,11.
PONTOGENEIA SUBANTARCTICA. J.L.BARNARD, 1958B:124.
GONDOGENEIA SUBANTARCTICA. J.L.BARNARD, 1972A:191.
GONDOGENEIA SUBANTARCTICA. J.L.BARNARD, 1972C:91.
PONTOGENEIA SUBANTARCTICA. BELLAN-SANTINI AND LEDOYER, 1974:661.

DISTRIBUTION: AUCKLAND ISLANDS: PORT ROSS, LOW TIDE (KS), TERROR COVE (AOW); CARNLEY HARBOUR, MASKED ISLAND, ROCKY COAST (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, LOW TIDE (KS).

GONDOGENEIA USHUAIAE (SCHELLENBERG)

PONTOGENEIA USHUAIAE SCHELLENBERG, 1931:189, FIG. 97.
PONTOGENEIA USHUAIAE. J.L.BARNARD, 1958B:124.
ACCEDOMOERA USHUAIAE. J.L.BARNARD, 1964C:59.
? GONDOGENEIA USHUAIAE. J.L.BARNARD, 1972A:191, (GENERIC STATUS NOT VERIFIED).
PONTOGENEIA USHUAIAE. BELLAN-SANTINI AND LEDOYER, 1974:661.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS (AS).
MAGELLANIC AREA: USHUAIA BAY (AS).

GONDOGENEIA SPECIES 1

PONTOGENEIA SP. STEPHENSEN, 1938:239.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND WEST BAY, JASON HARBOUR, 20 M (KS).

GONDOGENEIA SPECIES 2

PONTOGENEIA SP. STEPHENSEN, 1938:246.

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR, 42 M (KS).

GONDOGENEIA SPECIES 3

PONTOGENEIA ANTARCTICA. RUFFO, 1949:47, FIGS. 14-16, (IN PART, ACCORDING TO THURSTON, 1974A).

DISTRIBUTION: MAGELLANIC AREA: BEAGLE CHANNEL, PUERTO HARBERTON (SR).

GONDOGENEIA SPECIES 4

GONDOGENEIA SP. J.L.BARNARD, 1972C:91.
PONTOGENEIA ANTARCTICA. CHILTON, 1909A:624.

DISTRIBUTION: ANTIPODES ISLANDS: (CC).
AUCKLAND ISLANDS: CARNLEY HARBOUR (CC).
CAMPBELL ISLAND: (CC).

HALIRAGES BATEI (CUNNINGHAM)

ATYLUS ? BATEI CUNNINGHAM, 1871:498, PL. 59, FIG. 9.
HALIRAGES BATEI. STEBBING, 1906:292.
HALIRAGES BATEI. J.L.BARNARD, 1958B:33, (DUBIOUS SPECIES).

DISTRIBUTION: MAGELLANIC AREA: STRAIT OF MAGELLAN, POSESION BAY (ROC).

HALIRAGES HUXLEYANUS (BATE)

ATYLUS HUXLEYANUS BATE, 1862:135, PL. 25, FIG. 4.
ATYLUS HUXLEYANUS. CUNNINGHAM, 1871:498.
ACANTHOZONE HUXLEYANA. DELLA VALLE, 1893:612, PL. 59, FIG. 23.
HALIRAGES HUXLEYANUS. STEBBING, 1914:362.
HALIRAGES HUXLEYANUS. SCHELLENBERG, 1931:176, PL. 1, FIG. K.
HALIRAGES HUXLEYANUS. K.H.BARNARD, 1932:159, FIG. 93.
HALIRAGES HUXLEYANUS. J.L.BARNARD, 1958B:33.
NOT HALIRAGES HUXLEYANUS. STEBBING, 1888:334,902, PL. 73, (=HALIRAGES REGIS).
NOT HALIRAGES HUXLEYANUS. STEBBING, 1906:291, (=HALIRAGES REGIS).

DISTRIBUTION: FALKLAND ISLANDS: PORT STANLEY (TRRS); BERKELEY SOUND, 25 M (AS).
MAGELLANIC AREA: STRAIT OF MAGELLAN (ROC); NUEVA ISLAND, 54 M; LENNOX COVE, 18-45 M; PORVENIR (AS).

DEPTH RANGE: 18-54 M.

HALIRAGES REGIS (STEBBING)

BOVALLIA REGIS STEBBING, 1914:362, PL. 8.
HALIRAGES HUXLEYANUS. STEBBING, 1888:334,902, PL. 73.
HALIRAGES HUXLEYANUS. STEBBING, 1906:291.
HALIRAGES REGIS. K.H.BARNARD, 1932:161, FIG. 94.
HALIRAGES REGIS. J.L.BARNARD, 1958B:33.

DISTRIBUTION: FALKLAND ISLANDS: ROY COVE; PORT STANLEY (TRRS); PORT WILLIAM, SPARROW COVE, 10-16 M (KHB).

HALIRAGES STEBBINGI SCHELLENBERG

HALIRAGES STEBBINGI SCHELLENBERG, 1931:176, PL. 1, FIG. L.
HALIRAGES STEBBINGI. J.L.BARNARD, 1958B:33.

DISTRIBUTION: FALKLAND ISLANDS: BERKELEY SOUND, 25 M; PORT LOUIS, 7 M (AS).
MAGELLANIC AREA: NUEVA ISLAND, 54 M; STEWART BAY, 36 M; LENNOX COVE, 18-36 M; LENNOX ISLAND, 18-45 M; PUERTO EUGENIA, 18-27 M; PORVENIR, 11-18 M; PUERTO CONDOR, 90 M; USHUAIA BAY; 'LAGOTOWIA' 18 M (AS).

DEPTH RANGE: 7-90 M.

HALIRAGOIDES AUSTRALIS CHILTON

HALIRAGOIDES AUSTRALIS CHILTON, 1912:489.
HALIRAGOIDES AUSTRALIS. J.L.BARNARD, 1958B:33.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC).

HARPINIOIDELLA FISSICAUDA SCHELLENBERG

HARPINIOIDELLA FISSICAUDA SCHELLENBERG, 1926A:357, FIG. 53.
HARPINIOIDELLA FISSICAUDA. J.L.BARNARD, 1958B:123.
HARPINIOIDELLA FISSICAUDA. J.L.BARNARD, 1962D:66, FIG. 62, TABLE 10.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

EXTRINSIC DISTRIBUTION: CAPE BASIN.

HARPINIOIDES DREPANOCHEIR STEBBING

HARPINIOIDES DREPANOCHEIR STEBBING, 1888:937, PL. 82.
ACANTHONOTOSOMA DREPANOCHEIR. DELLA VALLE, 1893:677, PL. 59, FIG. 87.
HARPINIOIDES DREPANOCHEIR. STEBBING, 1906:298.
HARPINIOIDES DREPANOCHEIR. STEBBING, 1910A:592,639.
HARPINIOIDES DREPANOCHEIR. PIRLOT, 1934:189.
HARPINIOIDES DREPANOCHEIR. J.L.BARNARD, 1958B:33.
HARPINIOIDES DREPANOCHEIR. BELLAN-SANTINI AND LEDOYER, 1974:646, PL. 2.

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS); MORBIHAN BAY, BENIGUET REEF, 35 M (BS&L).

DEPTH RANGE: 35-229 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; INDONESIA.

LIOUVILLEA OCULATA CHEVREUX

LIOUVILLEA OCULATA CHEVREUX, 1912:214.
LIOUVILLEA OCULATA. CHEVREUX, 1913:139, FIGS. 34-36.
LIOUVILLEA OCULATA. SCHELLENBERG, 1931:160.
LIOUVILLEA OCULATA. K.H.BARNARD, 1932:152.
LIOUVILLEA OCULATA. STEPHENSEN, 1947:51.
LIOUVILLEA OCULATA. J.L.BARNARD, 1958B:139.
LIOUVILLEA OCULATA. THURSTON, 1974A:71, FIGS. 29F,G.
LIOUVILLEA OCULATA. THURSTON, 1974B:32.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
PALMER ARCHIPELAGO: PORT LOCKROY, 20-30 M (KS), LECUYER POINT, PELTIER CHANNEL, LOW TIDE-27 M (MHT).
SOUTH ORKNEY ISLANDS: NORMANNA STRAIT, 24-36 M (KHB); SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 5-15 M (MHT).
TRINITY PENINSULA: PAULET ISLAND, 63 36 S 55 48 W, 100-150 M (AS).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, 3-60 M (EC).

DEPTH RANGE: LOW TIDE-200 M.

LOPYASTIS MULTISETOSA (SCHELLENBERG)

ATYLOPSIS MULTISETOSA SCHELLENBERG, 1926A:351, FIG. 51.
ATYLOPSIS MULTISETOSA. J.L.BARNARD, 1958B:32.
ATYLOPSIS MULTISETOSA. THURSTON, 1974A:54, (KEY).
LOPYASTIS MULTISETOSA. THURSTON, 1974B:32,40, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 350-385 M (AS).
SOUTHERN OCEAN: INDIAN SECTOR, 65 31 S 85 20 E, 0-150 M (AS).

DEPTH RANGE: 0-385 M.

LOPYASTIS SIGNIENSIS (THURSTON)

ATYLOPSIS SIGNIENSIS THURSTON, 1974A:54, FIGS. 21H-Q,22A-N, (KEY).
LOPYASTIS SIGNIENSIS. THURSTON, 1974B:32,40, (KEY).

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-6 M (MHT).

METALEPTAMPHOPUS PECTINATUS CHEVREUX

METALEPTAMPHOPUS PECTINATUS CHEVREUX, 1912:215.
METALEPTAMPHOPUS PECTINATUS. CHEVREUX, 1913:144, FIGS. 37-40.
METALEPTAMPHOPUS PECTINATUS. SCHELLENBERG, 1931:178.
METALEPTAMPHOPUS PECTINATUS. J.L.BARNARD, 1958B:34.
METALEPTAMPHOPUS PECTINATUS. THURSTON, 1974A:56, FIG. 10L.
METALEPTAMPHOPUS PECTINATUS. THURSTON, 1974B:32.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 1-2 M (AS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 3-20 M, PAAL HARBOUR, 5-15 M; LAURIE ISLAND, SCOTIA BAY (MHT).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, PORT CIRCUMCISION, 6 M (EC).

DEPTH RANGE: 1-20 M.

ORADAREA ACUMINATA THURSTON

ORADAREA ACUMINATA THURSTON, 1974A:47, FIGS. 11H,U,12H,13H,18A-N,19A-J.
ORADAREA LONGIMANA. WALKER, 1907:32, (IN PART, PART =ORADAREA ROSSI, ORADAREA TRICARINATA AND ORADAREA WALKERI).
LEPTAMPHOPUS NOVAEZEALANDIAE. K.H.BARNARD, 1930:369, (IN PART).

DISTRIBUTION: OATES COAST: 329-366 M (KHB).
ROSS SEA: MCMURDO SOUND, HUT POINT; COULMAN ISLAND, 180 M (AOW).

DEPTH RANGE: 180-366 M.

ORADAREA BIDENTATA K.H.BARNARD

ORADAREA BIDENTATA K.H.BARNARD, 1932:165, FIGS. 96B,98.
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHILTON, 1912:488, (IN PART).
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHEVREUX, 1913:143, (IN PART).
ORADAREA BIDENTATA. STEPHENSEN, 1938:238.
ORADAREA BIDENTATA. STEPHENSEN, 1947:52, (IN PART).
ORADAREA BIDENTATA. J.L.BARNARD, 1958B:109.
ORADAREA BIDENTATA. THURSTON, 1974A:37, FIGS. 11F,S,12F,13F.
ORADAREA BIDENTATA. THURSTON, 1974B:33.

DISTRIBUTION: PALMER ARCHIPELAGO: FLANDRES BAY, 2-10 M; PORT LOCKROY, 20-120 M (KS), LECUYER POINT, PELTIER CHANNEL, LOW TIDE-18 M (MHT).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 22-110 M (KHB); COAL HARBOUR, 12 M; CUMBERLAND WEST BAY, JASON HARBOUR, 20 M; GODTHUL BAY, 16 M (KS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC), LAURIE ISLAND; SIGNY ISLAND, BORGE BAY, 3-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS), (MHT).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, PORT CIRCUMCISION, 5-6 M, LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: LOW TIDE-120 M.

ORADAREA EDENTATA K.H.BARNARD

ORADAREA EDENTATA K.H.BARNARD, 1932:167, FIGS. 96D,101.
LEPTAMPHOPUS NOVAE-ZEALANDIAE. SHOEMAKER, 1945A:290.
ORADAREA ? WALKERI. STEPHENSEN, 1947:52, (IN PART).
ORADAREA ? EDENTATA. STEPHENSEN, 1947:53.
ORADAREA EDENTATA. J.L.BARNARD, 1958B:109.
ORADAREA EDENTATA. BELLAN-SANTINI AND LEDOYER, 1974:646, PL. 3B.
ORADAREA EDENTATA. THURSTON, 1974A:46, FIGS. 11B,O,12B,13B.
ORADAREA EDENTATA. THURSTON, 1974B:33.

DISTRIBUTION: CROZET ISLANDS: EAST ISLAND, ADVENTURE BAY (BS&L).
PALMER ARCHIPELAGO: MELCHIOR HARBOUR (CRS); PORT LOCKROY, GOUDIER ISLAND, LOW TIDE, PELTIER CHANNEL, 18 M (MHT).
SOUTH GEORGIA: 'HYSTADHULLET' (KS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 6-14 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS), PORT FOSTER, 5-60 M (KHB).

DEPTH RANGE: LOW TIDE-75 M.

ORADAREA IMPRESSICAUDA K.H.BARNARD

ORADAREA IMPRESSICAUDA K.H.BARNARD, 1932:166, FIGS. 96C,100.
ORADAREA IMPRESSICAUDA. J.L.BARNARD, 1958B:109.
ORADAREA IMPRESSICAUDA. THURSTON, 1974A:47, FIGS. 11G,T,12G,13G.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

ORADAREA NOVAEZEALANDIAE (THOMSON)

PHERUSA NOVAE-ZEALANDIAE THOMSON, 1879A:239, PL. 10, FIG. C2.
PANOPLOEA DEBILIS THOMSON, 1880A:3, PL. 1, FIG. 3.
PANOPLAEA DEBILIS. THOMSON 1880B:213.
PHERUSA NEO-ZELANICA. THOMSON AND CHILTON, 1886:148.
PANOPLOEA DEBILIS. THOMSON AND CHILTON, 1886:150.
PANOPLOEA DEBILIS. THOMSON, 1889:262.
ACANTHOZONE LONGIMANA. DELLA VALLE, 1893:604,620, (IN PART).
PHERUSA NOVAE-ZEALANDIAE. HUTTON, 1904:259.
LEPTAMPHOPUS NOVAEZEALANDIAE. STEBBING, 1906:294.
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHILTON, 1909A:621.
LEPTAMPHOPUS NOVAE ZEALANDIAE. CHILTON, 1911A:308.
LEPTAMPHOPUS NOVAE-ZEALANDIAE. THOMSON, 1913:243.
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHILTON, 1920:1, FIGS. 1-5.
LEPTAMPHOPUS NOVAEZEALANDIAE. STEPHENSEN, 1927:314.
LEPTAMPHOPUS NOVAEZEALANDIAE. K.H.BARNARD, 1930:369, (IN PART, PART =ORADAREA ACUMINATA).
LEPTAMPHOPUS NOVAE-ZEALANDIAE. K.H.BARNARD, 1932:162, FIGS. 95A-D.
LEPTAMPHOPUS NOVAEZEALANDIAE. STEPHENSEN, 1938:244.
LEPTAMPHOPUS NOVAEZEALANDIAE. J.L.BARNARD, 1958B:33.
ORADAREA NOVAEZEALANDIAE. J.L.BARNARD, 1972C:28,68, FIG. 30, (KEY).
ORADAREA NOVEAZEALANDIAE. LOWRY, 1974:109,124, FIGS. 7H,I, (KEY).
ORADAREA NOVAEZEALANDIAE. THURSTON, 1974A:50, FIGS. 10N,O,11K,N,12K,13L.
NOT LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHILTON, 1912:488, (=ORADAREA WALKERI, ORADAREA BIDENTATA AND ORADAREA UNIDENTATA).
NOT LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHEVREUX, 1913:143, (=ORADAREA BIDENTATA, ORADAREA OCELLATA AND ORADAREA UNIDENTATA).
NOT LEPTAMPHOPUS NOVAE ZEALANDIAE. SCHELLENBERG, 1926A:351, (=ORADAREA WALKERI, ORADAREA TRIDENTATA AND ATYLOPSIS MEGALOPS).
NOT LEPTAMPHOPUS NOVAE ZEALANDIAE. SCHELLENBERG, 1926B:195, (PROBABLY =ORADAREA TRIDENTATA).
NOT LEPTAMPHOPUS NOVAE-ZEALANDIAE. SHOEMAKER, 1945A:290, (=ORADAREA EDENTATA).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR (CC), COLERIDGE BAY, 50 M (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

ORADAREA OCELLATA THURSTON

ORADAREA OCELLATA THURSTON, 1974A:40, FIGS. 11E,R,12E,13E,14A-P,15A-G.
ORADAREA LONGIMANA. CHEVREUX, 1906E:54, (IN PART).
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHEVREUX, 1913:143, (IN PART).
ORADAREA ? WALKERI. STEPHENSEN, 1947:52, (IN PART).
ORADAREA OCELLATA. THURSTON, 1974B:33.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, GOUDIER ISLAND, LOW TIDE, PELTIER CHANNEL, 18 M (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 4-20 M, PAAL HARBOUR, 49 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS).
TRINITY PENINSULA: HOPE BAY, GRUNDEN ROCK, LOW TIDE (MHT).
WILHELM ARCHIPELAGO: PORT CHARCOT, 20 M; PETERMANN ISLAND, PORT CIRCUMCISION, 5-6 M, LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: LOW TIDE-75 M.

ORADAREA ROSSI THURSTON

ORADAREA ROSSI THURSTON, 1974A:50, FIGS. 11A,M,12A,13A,20A-N,21A-G.
ORADAREA LONGIMANA WALKER, 1903A:56, PL. 10, FIGS. 77-89, (IN PART, PART =ORADAREA WALKERI).
ORADAREA LONGIMANA. WALKER, 1907:32, (IN PART, PART =ORADAREA ACUMINATA, ORADAREA TRICARINATA, AND ORADAREA WALKERI).

DISTRIBUTION: ROSS SEA: COULMAN ISLAND, 180 M; 78 35 S, SURFACE; CAPE ADARE, 14 M (AOW).

DEPTH RANGE: SURFACE-180 M.

ORADAREA TRICARINATA K.H.BARNARD

ORADAREA TRICARINATA K.H.BARNARD, 1932:166, FIGS. 96A,99.
ORADAREA LONGIMANA. WALKER, 1907:32, (IN PART, PART =ORADAREA ACUMINATA, ORADAREA ROSSI AND ORADAREA WALKERI).
? ORADAREA TRICARINATA. NICHOLLS, 1938:93.
ORADAREA TRICARINATA. J.L.BARNARD, 1958B:109.
ORADAREA TRICARINATA. THURSTON, 1974A:47, FIGS. 11J,W,12J,13K.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 108 M (GEN).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
ROSS SEA: COULMAN ISLAND, 180 M (AOW).
SOUTH GEORGIA: STROMNESS HARBOUR, 155-178 M (KHB).
SOUTH SHETLAND ISLANDS: OFF DECEPTION ISLAND, 62 59 S 60 28 W, 525 M (KHB).

DEPTH RANGE: 108-525 M.

ORADAREA TRIDENTATA K.H.BARNARD

ORADAREA TRIDENTATA K.H.BARNARD, 1932:163,315, FIGS. 96A,97.
LEPTAMPHOPUS NOVAE ZEALANDIAE. SCHELLENBERG, 1926A:351, (IN PART).
? LEPTAMPHOPUS NOVAE ZEALANDIAE. SCHELLENBERG, 1926B:195.
ORADAREA WALKERI. SCHELLENBERG, 1931:177, (IN PART).
ORADAREA TRIDENTATA. STEPHENSEN, 1938:238.
ORADAREA ? WALKERI. STEPHENSEN, 1947:52, (IN PART).
ORADAREA TRIDENTATA. J.L.BARNARD, 1958B:109.
ORADAREA TRIDENTATA. BELLAN-SANTINI AND LEDOYER, 1974:646, PL. 3A.
ORADAREA TRIDENTATA. THURSTON, 1974A:46, FIGS. 11I,V,12I,13I.
ORADAREA TRIDENTATA. THURSTON, 1974B:33.

DISTRIBUTION: KERGUELEN ISLANDS: OBSERVATORY BAY (AS); MORBIHAN BAY, LOW TIDE-15 M, AUSTRALIA ISLAND, 24 M, PORT JEANNE-D'ARC, 14-17 M, JOLIETTE COVE, 10-54 M (BS&L).
PALMER ARCHIPELAGO: PORT LOCKROY, 20-120 M (KS), LOW TIDE (MHT).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS), 230-250 M (KHB); CUMBERLAND EAST BAY, 0-273 M; STROMNESS HARBOUR, 26-35 M; UNDINE HARBOUR, 18-27 M; KING EDWARD COVE (KHB); COAL HARBOUR, 13-16 M (KS).

DEPTH RANGE: 0-273 M.

ORADAREA UNIDENTATA THURSTON

ORADAREA UNIDENTATA THURSTON, 1974A:43, FIGS. 11C,P,12C,13C,16A-O,17A-G.
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHILTON, 1912:488, (IN PART).
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHEVREUX, 1913:143, (IN PART).
ORADAREA ? WALKERI. STEPHENSEN, 1947:52, (IN PART).
ORADAREA UNIDENTATA. THURSTON, 1974B:33.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, GOUDIER ISLAND, 1 M, LECUYER POINT, PELTIER CHANNEL, LOW TIDE-18 M (MHT).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC); SIGNY ISLAND, BORGE BAY, 2-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: LOW TIDE-75 M.

ORADAREA WALKERI SHOEMAKER

ORADAREA WALKERI SHOEMAKER, 1930:301.
ORADAREA LONGIMANA WALKER, 1903A:56, PL. 10, FIGS. 77-89, (IN PART, PART =ORADAREA ROSSI).

ORADAREA LONGIMANA. CHEVREUX, 1906E:54, (IN PART).
ORADAREA LONGIMANA. WALKER, 1907:32, (IN PART, PART =ORADAREA ACUMINATA, ORADAREA ROSSI AND ORADAREA TRICARINATA).
LEPTAMPHOPUS NOVAE-ZEALANDIAE. CHILTON, 1912:488, (IN PART).
LEPTAMPHOPUS NOVAE ZEALANDIAE. SCHELLENBERG, 1926A:351, (IN PART).
ORADAREA WALKERI. SCHELLENBERG, 1931:177, (IN PART, PART =ORADAREA TRIDENTATA).
ORADAREA WALKERI. NICHOLLS, 1938:92.
ORADAREA ? WALKERI. STEPHENSEN, 1947:52, (IN PART, PART =ORADAREA EDENTATA, ORADAREA OCELLATA, ORADAREA TRIDENTATA AND ORADAREA UNIDENTATA).
ORADAREA WALKERI. J.L.BARNARD, 1958B:109.
ORADAREA WALKERI. BELLAN-SANTINI, 1972A:184, PL. 10.
ORADAREA WALKERI. BELLAN-SANTINI, 1972B:684.
ORADAREA WALKERI. THURSTON, 1974A:37, FIGS. 11D,Q,12D,13D.
ORADAREA WALKERI. THURSTON, 1974B:33.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-108 M (GEN); GEOLOGIE ARCHIPELAGO, 6-31 M (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: TREPASSEY ISLAND, 4 M (MHT).
PALMER ARCHIPELAGO: FLANDRES BAY (EC), 2-10 M (KS); WIENCKE ISLAND, 20-25 M (EC); PORT LOCKROY, GOUDIER ISLAND, LOW TIDE, LECUYER POINT, PELTIER CHANNEL, 18-27 M (MHT).
ROSS SEA: CAPE ADARE, 14-36 M; COULMAN ISLAND, 180 M (AOW).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC); SIGNY ISLAND, PAAL HARBOUR, 20-25 M, BORGE BAY, 5-20 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS).

DEPTH RANGE: LOW TIDE-385 M.

PARAMOERA AUCKLANDICA (WALKER)

ATYLOIDES AUCKLANDICUS WALKER, 1908:33, PL. 5, FIGS. 1,2.
PARAMOERA AUCKLANDICA. STEPHENSEN, 1927:325.
PARAMOERA AUCKLANDICA. RUFFO, 1949:39.
PARAMOERA AUCKLANDICA. J.L.BARNARD, 1958B:123.
PARAMOERA AUCKLANDICA. J.L.BARNARD, 1972C:82.
PARAMOERA AUCKLANDICA. BELLAN-SANTINI AND LEDOYER, 1974:654.
PARAMOERA AUCKLANDICA. THURSTON, 1974B:34.
NOT ATYLOIDES AUCKLANDICUS. CHILTON, 1909A:628, FIG. 3, (=PARAMOERA SPECIES OF J.L.BARNARD, 1972C:87).

DISTRIBUTION: AUCKLAND ISLANDS: LAURIE HARBOUR (AOW).

PARAMOERA BRACHYURUS SCHELLENBERG

PARAMOERA BRACHYURUS SCHELLENBERG, 1931:201, FIG. 102, (SENIOR HOMONYM).
PARAMOERA BRACHYURUS. RUFFO, 1949:39.
PARAMOERA BRACHYURUS. J.L.BARNARD, 1958B:123.
PARAMOERA BRACHYURUS. BELLAN-SANTINI AND LEDOYER, 1974:655.
PARAMOERA BRACHYURUS. THURSTON, 1974A:72.
PARAMOERA BRACHYURUS. THURSTON, 1974B:34.
NOT PARAMOERA BRACHYURA. STEPHENSEN, 1949:18, FIG. 6, (JUNIOR HOMONYM).

DISTRIBUTION: MAGELLANIC AREA: PUERTO TORO, LOW TIDE; PUNTA ARENAS (AS).
SOUTH GEORGIA: CUMBERLAND BAY, INTERTIDAL (AS).

PARAMOERA CHEVREUXI (STEPHENSEN)

ATYLOIDES CHEVREUXI STEPHENSEN, 1927:339, FIG. 18.
? ATYLOIDES MAGELLANICA. CHILTON, 1909A:627, (QUESTIONED BY J.L.BARNARD, 1972C).
PARAMOERA CHEVREUXI. SCHELLENBERG, 1929A:281.
PARAMOERA CHEVREUXI. RUFFO, 1949:39.
ATYLOIDES CHEVREUXI. J.L.BARNARD, 1958B:125.
PARAMOERA CHEVREUXI. J.L.BARNARD, 1972C:29,82, FIGS. 38,39, (KEY).
PARAMOERA CHEVREUXI. BELLAN-SANTINI AND LEDOYER, 1974:655.
PARAMOERA CHEVREUXI. THURSTON, 1974B:34.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR (CC), LOW TIDE (KS); PORT ROSS, LOW TIDE; FIGURE OF EIGHT ISLAND, LOW TIDE; MASKED ISLAND, ROCKS (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, LOW TIDE (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

PARAMOERA EDOUARDI SCHELLENBERG

PARAMOERA EDOUARDI SCHELLENBERG, 1929A:281.
PONTOGENEIA MAGELLANICA. CHEVREUX, 1906E:64, FIGS. 37-39.
ATYLOIDES MAGELLANICA. CHILTON, 1912:496, PL. 1, FIG. 18, (IN PART, PART =GONDOGENEIA ANTARCTICA).
ATYLOIDES MAGELLANICUS. CHEVREUX, 1913:178.
PARAMOERA EDOUARDI. SCHELLENBERG, 1931:198.
PARAMOERA EDOUARDI. K.H.BARNARD, 1932:207, FIG. 118M.
PARAMOERA ? EDOUARDI. STEPHENSEN, 1947:65.
PARAMOERA EDOUARDI. RUFFO, 1949:39.
PARAMOERA EDOUARDI. J.L.BARNARD, 1958B:123.
? PONTOGENEIA MAGALLANICA. CASTELLANOS AND PEREZ, 1963:10, TABLE 5, FIG. 17A, (IN PART, QUESTIONED BY THURSTON, 1974A).
PARAMOERA EDOUARDI. BELLAN-SANTINI AND LEDOYER, 1974:656.
PARAMOERA EDOUARDI. THURSTON, 1974A:72, FIG. 29H.
PARAMOERA EDOUARDI. THURSTON, 1974B:34.

DISTRIBUTION: DANCO COAST: SPRING POINT, TIDE POOL (C&P).
MARGUERITE BAY: STONINGTON ISLAND, LITTORAL (MHT).
PALMER ARCHIPELAGO: FLANDRES BAY (EC); PORT LOCKROY, GOUDIER ISLAND, LITTORAL (MHT).
SOUTH GEORGIA: CUMBERLAND BAY, INTERTIDAL-310 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, SHORE POOLS (CC); SIGNY ISLAND, BORGE BAY, LITTORAL-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY (EC); DECEPTION ISLAND, 75 M (KS), PORT FOSTER, 5-60 M (KHB).
TRINITY PENINSULA: HOPE BAY, 37-55 M, GRUNDEN ROCK, LITTORAL, HUT COVE, LITTORAL (MHT).

DEPTH RANGE: INTERTIDAL-310 M.

PARAMOERA FASCICULATA (THOMSON)

MEGAMOERA FASCICULATA THOMSON, 1880A:5, PL. 1, FIG. 5.
MEGAMAERA FASCICULATA. THOMSON, 1880B:218.
MEGAMOERA FASCICULATA. THOMSON AND CHILTON, 1886:146.
MEGAMOERA FASCICULATA. THOMSON, 1889:261.
MAERA FASCICULATA. THOMSON, 1893:28.
MOERA FASCICULATA. CHILTON, 1906B:271.
MAERA FASCICULATA. STEBBING, 1906:741.
AUCKLANDIA ENDERBYI WALKER, 1908:35, PL. 5, FIGS. 3,4.
PARAMOERA FASCICULATA. STEBBING, 1910A:640.
PARAMOERA AUSTRINA. THOMSON, 1913:243.
PARAMOERA FASCICULATA. STEPHENSEN, 1927:332, FIGS. 15,16.
PARAMOERA FASCICULATA. STEPHENSEN, 1938:246.
PARAMOERA FASCICULATA. RUFFO, 1949:39.
PARAMOERA FASCICULATA. J.L.BARNARD, 1958B:123.
PARAMOERA FASCICULATA. J.L.BARNARD, 1972C:82.
PARAMOERA FASCICULATA. BELLAN-SANTINI AND LEDOYER, 1974:656.
PARAMOERA FASCICULATA. THURSTON, 1974B:34.

DISTRIBUTION: AUCKLAND ISLANDS: ENDERBY ISLAND (AOW); CARNLEY HARBOUR, FIGURE OF EIGHT ISLAND, LOW TIDE, MASKED ISLAND, ROCKS (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, LOW TIDE (KS).

EXTRINSIC DISTRIBUTION: AUSTRALIA; NEW ZEALAND.

PARAMOERA FISSICAUDA (DANA)

AMPHITOE FISSICAUDA DANA, 1852:214.
IPHIMEDIA FISSICAUDA. DANA, 1853-55:929, PL. 63, FIG. 4.
ATYLUS AUSTRINUS BATE, 1862:137, PL. 26, FIG. 4.
ATYLUS FISSICAUDA. BATE, 1862:141, PL. 27, FIG. 3.
PARAMOERA AUSTRALIS MIERS, 1875A:75.
ATYLUS AUSTRALIS. MIERS, 1875B:117.
ATYLUS (?) AUSTRALIS. SMITH, 1876:61.
ATYLUS AUSTRALIS. MIERS, 1879A:208, PL. 11, FIG. 5.
ATYLUS MEGALOPHTHALMUS. HASWELL, 1882:244.
? ATYLUS MEGALOPHTHALMUS. CHILTON, 1884B:1037, (QUESTIONED BY STEBBING, 1906).
ATYLOIDES AUSTRALIS. STEBBING, 1888:914, PLS. 75,76.
ATYLUS AUSTRINUS. DELLA VALLE, 1893:702.
ATYLOIDES AUSTRALIS. THOMSON, 1895:211.
PONTOGENEIA FISSICAUDA. STEBBING, 1906:361.
PARAMOERA AUSTRINA. STEBBING, 1906:363.
? PARAMOERA AUSTRINA. CHILTON, 1909A:625, (QUESTIONED BY J.L.BARNARD, 1972C).

PARAMOERA AUSTRINA. STEBBING, 1910A:640.
PARAMOERA AUSTRINA. STEBBING, 1910B:456.
PARAMOERA AUSTRINA. CHILTON, 1913:58.
PARAMOERA AUSTRINA. SHOEMAKER, 1914:75.
PARAMOERA AUSTRINUS. STEBBING, 1914:365.
PARAMOERA AUSTRINA VAR. MEGALOPHTHALMA. CHILTON, 1921B:68, FIGS. 8A-C.
? PARAMOERA AUSTRINA. CHILTON, 1925B:317, (QUESTIONED BY J.L.BARNARD, 1972C).
PARAMOERA AUSTRINA. MONOD, 1926:55, FIG. 54.
PARAMOERA CAPENSIS F. AUSTRINA. SCHELLENBERG, 1926A:363.
PARAMOERA CAPENSIS F. AUSTRINA. SCHELLENBERG, 1926B:195.
? PARAMOERA (CAPENSIS F.) AUSTRINA? STEPHENSEN, 1927:328, FIGS. 13,14.
? PARAMOERA CAPENSIS F. AUSTRINA. PESTA, 1928:78.
PARAMOERA FISSICAUDA. SCHELLENBERG, 1931:194, FIGS. 99,100.
PARAMOERA AUSTRINA. ANDRE, 1932:175.
PARAMOERA FISSICAUDA FISSICAUDA. SCHELLENBERG, 1935:232.
PARAMOERA FISSICAUDA. STEPHENSEN, 1938:240.
PARAMOERA FISSICAUDA FISSICAUDA. RUFFO, 1947:328.
PARAMOERA ? FISSICAUDA. STEPHENSEN, 1947:64.
PARAMOERA FISSICAUDA. RUFFO, 1949:39.
PARAMOERA FISSICAUDA. J.L.BARNARD, 1958B:123.
PARAMOERA FISSICAUDA. J.L.BARNARD, 1972C:84.
PARAMOERA AUSTRINA. BELLAN-SANTINI AND LEDOYER, 1974:654,663, PL. 10.
PARAMOERA FISSICAUDA. BELLAN-SANTINI AND LEDOYER, 1974:656,663, PLS. 13,14.
PARAMOERA AUSTRALIS. BELLAN-SANTINI AND LEDOYER, 1974:658.
PARAMOERA AUSTRINA F. KERGUELENI BELLAN-SANTINI AND LEDOYER, 1974:663, PLS. 11,12.
PARAMOERA FISSICAUDA. THURSTON, 1974A:72.
PARAMOERA AUSTRALIS. THURSTON, 1974B:34.
NOT PARAMOERA AUSTRINA VAR. WALKER, 1908:34, (=GONDOGENEIA SUBANTARCTICA).
NOT PARAMOERA AUSTRINA. CHILTON, 1912:498, (PART =PONTOGENEIELLA BREVICORNIS AND PONTOGENEIELLA LONGICORNIS).
NOT PARAMOERA AUSTRINA. THOMSON, 1913:243, (=PARAMOERA FASCICULATA).

DISTRIBUTION: AUCKLAND ISLANDS: (CC); PORT ROSS, LOW TIDE; CARNLEY HARBOUR, MASKED ISLAND, ROCKY COAST (KS).
CAMPBELL ISLAND: (CC); PERSEVERANCE HARBOUR (KS).
CROZET ISLANDS: SHIP COVE; POSSESSION ISLAND, BEACH (KS), NAVIRE BAY; EAST ISLAND, ADVENTURE BAY (BS&L).
FALKLAND ISLANDS: CAPE PEMBROKE, SHORE (CC); ROY COVE, LOW TIDE (TRRS); PORT LOUIS, LOW TIDE; PORT STANLEY, 2 M (AS).
KERGUELEN ISLANDS: (GMT); SURFACE-45 M (TRRS); ROCKY BEACHES (SIS); ROYAL SOUND; (EJM), (AS); OBSERVATORY BAY (EJM), (AS); PORT JEANNE-D'ARC (MA), (BS&L); MORBIHAN BAY, BOSSIERE FJORD, LOW TIDE-2 M, CHAT ISLAND, MOULES ISLAND, LOW TIDE; PORT AUX FRANCAIS, LOW TIDE-3 M; LAROSE FJORD, 0-1 M; PORT BIZET, LOW TIDE; CHRISTMAS HARBOUR; BAUDISSIN SOUND (BS&L).
MAGELLANIC AREA: OTTER ISLANDS; ULTIMA ESPERANZA, LOW TIDE; PUERTO ANGOSTO, LOW TIDE; 'KATANUSHUAIA', 18-22 M; HARRIS BAY, LOW TIDE; PUERTO TORO, LOW TIDE; GENTE GRANDE BAY, LOW TIDE; PUNTA ARENAS, LOW TIDE; PARAMO, LOW TIDE; 'PUERTO GALLEGOS', LOW TIDE; SANTA CRUZ, LOW TIDE; SMYTH CHANNEL; USHUAIA BAY, 2-4 M (AS); LONDONDERRY ISLAND, SAN NICOLAS BAY; SANTA ANA POINT (TM); STATEN ISLAND, PUERTO COOKE; STRAIT OF MAGELLAN, PUNTA TANDY (SR).
SOUTH GEORGIA: POSSESSION BAY (CRS); OFF GRYTVIKEN, LOW TIDE (AS); COAL HARBOUR; ELSEHUL; CUMBERLAND WEST BAY, JASON HARBOUR, 20 M (KS); MAIVIKEN (OP).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 4-18 M (CC).

DEPTH RANGE: LOW TIDE-45 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; CHATHAM ISLANDS; CHILE; GOUGH ISLAND; NEW ZEALAND; SOUTH ATLANTIC OCEAN.

PARAMOERA GREGARIA (PFEFFER)

STEBBINGIA GREGARIA PFEFFER, 1888:110, PL. 2, FIG. 7.
STEBBINGIA GREGARIA. STEBBING, 1906:358.
? STEBBINGIA GREGARIA. WALKER, 1907:33.
PARAMOERA GREGARIA. K.H.BARNARD, 1932:206, FIGS. 118I,124.
? PARAMOERA SP. NICHOLLS, 1938:116, FIGS. 52G,59, (SYNONOMY SUGGESTED BY J.L.BARNARD, 1972C).
PARAMOERA GREGARIA. STEPHENSEN, 1949:16, FIG. 5.
PARAMOERA GREGARIA. MACNAE, 1953:1026.
PARAMOERA GREGARIA. J.L.BARNARD, 1958B:123.
? PARAMOERA SP. J.L.BARNARD, 1972C:85.
PARAMOERA GREGARIA. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA GREGARIA. THURSTON, 1974A:72.
PARAMOERA GREGARIA. THURSTON, 1974B:34.

DISTRIBUTION: MACQUARIE ISLAND: GARDEN BAY, LOW WATER; HASSELBROUGH BAY, 21 M (GEN).
MAGELLANIC AREA: HERMITE ISLAND, BEACH (KHB).
ROSS SEA: WINTER QUARTERS BAY (AOW).
SOUTH GEORGIA: (GP); OCEAN HARBOUR, BEACH (KHB).

DEPTH RANGE: BEACH-21 M.

EXTRINSIC DISTRIBUTION: GOUGH ISLAND.

PARAMOERA HAMILTONI NICHOLLS

PARAMOERA HAMILTONI NICHOLLS, 1938:117, FIGS. 52H,N,60.
PARAMOERA HAMILTONI. RUFFO, 1949:39.
PARAMOERA HAMILTONI. J.L.BARNARD, 1958B:123.
PARAMOERA HAMILTONI. J.L.BARNARD, 1972C:84.
PARAMOERA HAMILTONI. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA HAMILTONI. THURSTON, 1974B:34.

DISTRIBUTION: MACQUARIE ISLAND: NORTH END, LOW TIDE; SOUTH EAST HARBOUR (GEN).

PARAMOERA HERMITENSIS K.H.BARNARD

PARAMOERA HERMITENSIS K.H.BARNARD, 1932:208, FIGS. 118L,126.
PARAMOERA HERMITENSIS. RUFFO, 1949:39.
PARAMOERA HERMITENSIS. J.L.BARNARD, 1958B:123.
PARAMOERA HERMITENSIS. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA HERMITENSIS. THURSTON, 1974A:72.
PARAMOERA HERMITENSIS. THURSTON, 1974B:34.

DISTRIBUTION: MAGELLANIC AREA: HERMITE ISLAND, 30-35 M (KHB).

PARAMOERA HURLEYI THURSTON

PARAMOERA HURLEYI THURSTON, 1974A:73, FIGS. 30A-Q,31A-I.
PARAMOERA HURLEYI. BELLAN-SANTINI AND LEDOYER, 1974:661.
PARAMOERA HURLEYI. THURSTON, 1974B:34.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 5-25 M (MHT).

DEPTH RANGE: 5-25 M.

PARAMOERA HUSVIKENSIS THURSTON

PARAMOERA HUSVIKENSIS THURSTON, 1974B:35, FIGS. 11,12.

DISTRIBUTION: SOUTH GEORGIA: HUSVIK, LOW TIDE (MHT).

PARAMOERA MACQUARIAE NICHOLLS

PARAMOERA MACQUARIAE NICHOLLS, 1938:119, FIGS. 52J,61.
PARAMOERA MACQUARIAE. RUFFO, 1949:39.
PARAMOERA MACQUARIAE. J.L.BARNARD, 1958B:123.
PARAMOERA MACQUARIAE. J.L.BARNARD, 1972C:85.
PARAMOERA MACQUARIAE. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA MACQUARIAE. THURSTON, 1974B:34.

DISTRIBUTION: MACQUARIE ISLAND: NORTH END, BEACH (GEN).

PARAMOERA OBLIQUIMANUS K.H.BARNARD

PARAMOERA OBLIQUIMANUS K.H.BARNARD, 1932:208, FIGS. 118J,125.
PARAMOERA OBLIQUIMANUS. RUFFO, 1949:39.
PARAMOERA OBLIQUIMANUS. J.L.BARNARD, 1958B:123.
PARAMOERA OBLIQUIMANUS. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA OBLIQUIMANA. THURSTON, 1974A:72.
PARAMOERA OBLIQUIMANUS. THURSTON, 1974B:34.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, PORT STANLEY, SHORE (KHB).

PARAMOERA PARVA RUFFO

PARAMOERA PARVA RUFFO, 1949:41, FIGS. 13,14.
PARAMOERA PARVA. J.L.BARNARD, 1958B:123.
PARAMOERA PARVA. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA PARVA. THURSTON, 1974A:72.
PARAMOERA PARVA. THURSTON, 1974B:34.

DISTRIBUTION: MAGELLANIC AREA: BEAGLE CHANNEL, LAPATAIA (SR).

PARAMOERA PFEFFERI SCHELLENBERG

PARAMOERA PFEFFERI SCHELLENBERG, 1931:198, FIG. 101.
PARAMOERA PFEFFERI. SCHELLENBERG, 1935:232.
PARAMOERA PFEFFERI. RUFFO, 1949:39.
PARAMOERA PFEFFERI. J.L.BARNARD, 1958B:123.
PARAMOERA PFEFFERI. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA PFEFFERI. THURSTON, 1974A:72.
PARAMOERA PFEFFERI. THURSTON, 1974B:34,38.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS; PORT WILLIAM, 22 M; CAPE PEMBROKE, LOW TIDE; PORT STANLEY, 2 M (AS).
MAGELLANIC AREA: ISTHMUS BAY, LOW TIDE; PUERTO ANGOSTO, 18 M; 'PUERTO LAGUNA'; 'KATANUSHUAIA', 18-20 M; NUEVA ISLAND, 2 M; LENNOX COVE, 18 M; PUERTO HOPE, 11-18 M; PUNTA ARENAS, LOW TIDE; LENNOX ISLAND (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, LOW TIDE; CUMBERLAND BAY, 250-310 M (AS); HUSVIK, LOW TIDE (MHT).

DEPTH RANGE: LOW TIDE-310 M.

EXTRINSIC DISTRIBUTION: PERU.

PARAMOERA SCHELLENBERGI NICHOLLS

PARAMOERA SCHELLENBERGI NICHOLLS, 1938:120, FIGS. 52K,62.
PARAMOERA SCHELLENBERGI. RUFFO, 1949:39.
PARAMOERA SCHELLENBERGI. J.L.BARNARD, 1958B:123.
PARAMOERA SCHELLENBERGI. J.L.BARNARD, 1972C:85.
PARAMOERA SCHELLENBERGI. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA SCHELLENBERGI. THURSTON, 1974B:34.

DISTRIBUTION: MACQUARIE ISLAND: GARDEN BAY, LOW TIDE (GEN).

PARAMOERA WALKERI (STEBBING)

ATYLUS WALKERI STEBBING, 1906:728.
ATYLUS ANTARCTICUS WALKER, 1903A:58, PL. 11, FIGS. 91-97.
ATYLUS WALKERI. WALKER, 1907:34.
ATYLUS WALKERI. CHILTON, 1909A:624.
BOVALLIA WALKERI. CHEVREUX, 1913:169, FIGS. 53-55.
BOVALLIA MONOCULOIDES. SHOEMAKER, 1914:74, (IN PART, PART =BOVALLIA GIGANTEA AND EUSIROIDES MONOCULOIDES).
PARAMOERA WALKERI. MONOD, 1926:57.
PARAMOERA WALKERI. STEPHENSEN, 1927:326.
PARAMOERA WALKERI. SCHELLENBERG, 1929A:281.
PARAMOERA WALKERI. K.H.BARNARD, 1930:388,450.
PARAMOERA WALKERI. SCHELLENBERG, 1931:197.
? PARAMOERA WALKERI. K.H.BARNARD, 1932:206,315, FIG. 118L, (QUESTIONED BY NICHOLLS, 1938).
PARAMOERA WALKERI. NICHOLLS, 1938:114, FIGS. 52F,M,58A,B.
PARAMOERA WALKERI. STEPHENSEN, 1938:240.
PARAMOERA WALKERI. STEPHENSEN, 1947:64.
PARAMOERA WALKERI. RUFFO, 1949:39.
PARAMOERA WALKERI. J.L.BARNARD, 1958B:124.
PARAMOERA WALKERI. ANDRIASHEV, 1967:1588.
BOVALLIA WALKERI. GRUZOV ET. AL., 1967:128.
PARAMOERA WALKERI. ANDRIASHEV, 1968:150.
PARAMOERA WALKERI. EMISON, 1968:202, FIG. 12, TABLES 10-12.
BOVALLIA WALKERI. GRUZOV ET. AL., 1969:107.
PARAMOERA WALKERI. BELLAN-SANTINI, 1972A:186.
PARAMOERA WALKERI. BELLAN-SANTINI, 1972B:688.
PARAMOERA WALKERI. RAKUSA-SUSZCZEWSKI, 1972:11-36.
PARAMOERA WALKERI. KLEKOWSKI, ET. AL., 1973:301-308.
PARAMOERA WALKERI. RAKUSA-SUSZCZEWSKI AND KLEKOWSKI, 1973:475-488, FIGS. 1-7, TABLE 1.
PARAMOERA WALKERI. BELLAN-SANTINI AND LEDOYER, 1974:657.
PARAMOERA WALKERI. RAKUSA-SUSZCZEWSKI AND DOMINAS, 1974:261-226.
PARAMOERA WALKERI. THURSTON, 1974A:72.
PARAMOERA WALKERI. THURSTON, 1974B:34,38.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 7-9 M (GEN); GEOLOGIE ARCHIPELAGO (DBS).
DAVIS SEA: 'MIRNY STATION' (SRS).
ENDERBY LAND: ALASHEYEV BIGHT, THALA HILLS, 2-10 M (SRS); 67 40 S 45 50 E (KOR).
MARGUERITE BAY: STONINGTON ISLAND, LITTORAL (MHT).
PALMER ARCHIPELAGO: PORT LOCKROY, GOUDIER ISLAND, LITTORAL (MHT).
ROSS SEA: WINTER QUARTERS BAY, HUT POINT, 5-18 M; CAPE ADARE, BEACH (AOW), 10 M (KHB); MCMURDO SOUND, 13-250 M (KHB); CAPE CROZIER (WBE).
SOUTH GEORGIA: OFF GRYTVIKEN, 12-30 M; CUMBERLAND BAY, 250-310 M (AS), (KHB); KING EDWARD COVE (KHB); GODTHUL BAY, 55 M; 'HYSTADHULLET', 10-40 M; HOUND BAY, 18 M (KS).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, PENDULUM COVE (EC), PORT FOSTER, 5-60 M (KHB).

DEPTH RANGE: BEACH-310 M.

PARAMOERA SPECIES 1

PARAMOERA SP. SHOEMAKER, 1945A:291.

DISTRIBUTION: PALMER ARCHIPELAGO: MELCHIOR HARBOUR (CRS).

PARAMOERA SPECIES 2

PARAMOERA SP. J.L.BARNARD, 1972C:87.
ATYLOIDES AUCKLANDICUS. CHILTON, 1909A:628, FIG. 3.

DISTRIBUTION: AUCKLAND ISLANDS: ENDERBY ISLAND (CC).

PARAMOERA SPECIES 3

PARAMOERA SP. BELLAN-SANTINI AND LEDOYER, 1974:669, PL. 15.

DISTRIBUTION: CROZET ISLANDS: EAST ISLAND, ADVENTURE BAY (BS&L).
KERGUELEN ISLANDS: MORBIHAN BAY, CHAT ISLAND, BOSSIERE FJORD, LOW TIDE, PORT DOUZIEME, LITTORAL, JOLIETTE COVE, 10-54 M; PORT AUX FRANCAIS, LOW TIDE; BAUDISSIN SOUND, LOW TIDE (BS&L).

DEPTH RANGE: LOW TIDE-54 M.

PONTOGENEIELLA BREVICORNIS (CHEVREUX)

ATYLOIDES BREVICORNIS CHEVREUX, 1906C:84, FIG. 3.
ATYLOIDES BREVICORNIS. CHEVREUX, 1906E:79, FIGS. 45-47.
ATYLOIDES BREVICORNIS. CHEVREUX, 1911C:403.
PARAMOERA AUSTRINA. CHILTON, 1912:498, (IN PART, PART =PARAMOERA FISSICAUDA AND PONTOGENIELLA LONGICORNIS).
ATYLOIDES BREVICORNIS. CHILTON, 1925A:178.
PONTOGENEIELLA BREVICORNIS. SCHELLENBERG, 1929A:278.
PONTOGENEIELLA BREVICORNIS. SCHELLENBERG, 1931:191.
PONTOGENEIELLA BREVICORNIS. K.H.BARNARD, 1932:200, FIG. 118F.
PONTOGENEIELLA BREVICORNIS. NICHOLLS, 1938:109, FIGS. 52C,56.
PONTOGENEIELLA BREVICORNIS. STEPHENSEN, 1938:239.
PONTOGENEIELLA BREVICORNIS. STEPHENSEN, 1947:61.
PONTOGENEIELLA BREVICORNIS. J.L.BARNARD, 1958B:125.
PONTOGENEIELLA BREVICORNIS. J.L.BARNARD, 1972C:93.
PONTOGENEIELLA BREVICORNIS. BELLAN-SANTINI AND LEDOYER, 1974:669, PL. 16.
PONTOGENEIELLA BREVICORNIS. THURSTON, 1974A:85.
PONTOGENEIELLA BREVICORNIS. THURSTON, 1974B:38.

DISTRIBUTION: BOUVET ISLAND: 60 M (KS).
CROZET ISLANDS: (KS); POSSESSION ISLAND, NAVIRE BAY (BS&L).
MACQUARIE ISLAND: GARDEN BAY, LOW TIDE; NORTH END (GEN).
PALMER ARCHIPELAGO: PORT LOCKROY, FRENCH PASSAGE, 6-40 M (KS), GOUDIER ISLAND, LITTORAL, PELTIER CHANNEL, 18 M (MHT).
PETER 1 ISLAND: RANVIKA, 64 M (KS).
SOUTH GEORGIA: (MHT); CUMBERLAND BAY, 250-310 M; GRYTVIKEN (AS); LARSEN HARBOUR, DRYGALSKI FJORD, 2 M (KHB); GODTHUL BAY, 55 M; 'HYSTADHULLET' (KS); COAL HARBOUR, 19 M (KS).
SOUTH ORKNEY ISLANDS: (CC); SIGNY ISLAND, DOVE CHANNEL, 24-36 M (KHB), BORGE BAY, 5-20 M, PAAL HARBOUR, 5-25 M (MHT).
SOUTH SANDWICH ISLANDS: 55-91 M (EC); ZAVODOVSKI ISLAND, 56 17 S 27 30 W; CANDLEMAS ISLANDS, VULCAN POINT; BRISTOL ISLAND (KS), 46-64 M (MHT); VISOKOI ISLAND, 55-99 M (KS), 55-91 M (MHT).

SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 5-18 M (MHT), 75 M (KS), PORT FOSTER, 5-60 M (KHB).
TRINITY PENINSULA: HOPE BAY, HUT COVE, 9 M (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND (EC).

DEPTH RANGE: LOW TIDE-310 M.

PONTOGENEIELLA LEVIS (THOMSON)

AMPHITHONOTUS LAEVIS THOMSON, 1879B:330, PL. 16, FIGS. 1-4.
AMPHITHONOTUS LEVIS. THOMSON, 1880B:215, FIG. 6.
AMPHITHONOTUS LEVIS. THOMSON AND CHILTON, 1886:148.
AMPHITHONOTUS LEVIS. STEBBING, 1906:741.
PARADEXAMINE LAEVIS. THOMSON, 1913:243.
APHERUSA LEVIS. CHILTON, 1921A:222, FIGS. 2A-F.
? PARAMOERA (AUSTRINA VAR.) MEGALOPHTHALMA. STEPHENSEN, 1927:336, FIG. 17, (QUESTIONED BY J.L.BARNARD, 1972C).
APHERUSA LEVIS. K.H.BARNARD, 1930:369.
PARADEXAMINE LAEVIS. J.L.BARNARD, 1958B:39.
PONTOGENEIELLA LEVIS. J.L.BARNARD, 1972C:28,93, FIG. 44, (KEY).
PONTOGENEIELLA LEVIS. LOWRY, 1974:109,125, FIGS. 7B,D, (KEY).
NOT PHERUSA LAEVIS HASWELL, 1880A:260-261, PL. 9, FIG. 4.
NOT PONTOGENEIELLA LAEVIS. J.L.BARNARD, 1974A:143.

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

PONTOGENEIELLA LONGICORNIS (CHEVREUX)

ATYLOIDES LONGICORNIS CHEVREUX, 1906E:84, FIGS. 48-50.
PARAMOERA AUSTRINA. CHILTON, 1912:498, (IN PART, PART =PARAMOERA FISSICAUDA, PONTOGENEIELLA BREVICORNIS).
ATYLOIDES LONGICORNIS. CHEVREUX, 1913:179.
PONTOGENEIELLA LONGICORNIS. SCHELLENBERG, 1929A:278.
PONTOGENEIELLA LONGICORNIS. SCHELLENBERG, 1931:190.
PONTOGENEIELLA LONGICORNIS. K.H.BARNARD, 1932:200, FIG. 118F.
PONTOGENEIELLA LONGICORNIS. STEPHENSEN, 1947:62.
PONTOGENEIELLA LONGICORNIS. J.L.BARNARD, 1958B:125.
PONTOGENEIELLA LONGICORNIS. THURSTON, 1974A:86.
PONTOGENEIELLA LONGICORNIS. THURSTON, 1974B:39.

DISTRIBUTION: MARGUERITE BAY: TREPASSEY ISLAND, 4 M (MHT).
PALMER ARCHIPELAGO: WIENCKE ISLAND, 25 M; NEUMAYER CHANNEL, 129 M (EC); BISMARCK STRAIT, 90-130 M (KHB); PORT LOCKROY, 6-70 M (KS), LECUYER POINT, PELTIER CHANNEL, 18-27 M (MHT).
SOUTH GEORGIA: (MHT); GRYTVIKEN, 12-52 M; CUMBERLAND BAY, 250-310 M; STROMNESS HARBOUR, 8 M (AS); UNDINE HARBOUR, 18-27 M; CUMBERLAND EAST BAY, 18-38 M (KHB); 'HYSTADHULLET', 40 M (KS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 5-49 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT), 75 M (KS).
TRINITY PENINSULA: PAULET ISLAND, 100-150 M (AS).
WILHELM ARCHIPELAGO: PORT CHARCOT, 40 M; BOOTH ISLAND, 40 M; PETERMANN ISLAND, LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: 4-310 M.

PONTOGENEOIDES ABYSSI NICHOLLS

PONTOGENEOIDES ABYSSI NICHOLLS, 1938:106, FIG. 55.
PONTOGENEOIDES ABYSSI. J.L.BARNARD, 1958B:125.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 1566 M (GEN).

PONTOGENEOIDES DUBIA RUFFO

PONTOGENEOIDES DUBIA RUFFO, 1949:51, FIGS. 16,17.
PONTOGENEOIDES DUBIA. J.L.BARNARD, 1958B:125.

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 23 S 82 47 W (SR).

PROSTEBBINGIA GRACILIS (CHEVREUX)

STEBBINGIA GRACILIS CHEVREUX, 1912:218.
STEBBINGIA GRACILIS. CHEVREUX, 1913:173, FIGS. 56-58.
PROSTEBBINGIA GRACILIS. SCHELLENBERG, 1926A:358.
PROSTEBBINGIA GRACILIS. SCHELLENBERG, 1931:191.
PROSTEBBINGIA GRACILIS. K.H.BARNARD, 1932:201, FIGS. 118D,121.
PROSTEBBINGIA GRACILIS. STEPHENSEN, 1947:62.
PROSTEBBINGIA GRACILIS. J.L.BARNARD, 1958B:125.
? PROSTEBBINGIA GRACILIS. BELLAN-SANTINI, 1972A:187, PLS. 11,12, (QUESTIONED BY THURSTON, 1974B).
PROSTEBBINGIA GRACILIS. BELLAN-SANTINI, 1972B:688.
PROSTEBBINGIA GRACILIS. THURSTON, 1974A:84, FIG. 29I.
PROSTEBBINGIA GRACILIS. THURSTON, 1974B:39.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 10-130 M; CAPE GEODESIE, 70-170 M (DBS).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: GAUSSBERG, 170 M; 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: 254 M (EC); STONINGTON ISLAND, BACK BAY, 16 M; TREPASSEY ISLAND, 4 M (MHT).
PALMER ARCHIPELAGO: MELCHIOR ISLANDS, SCHOLLAERT CHANNEL, 4-10 M (KHB); PORT LOCKROY, LOW TIDE-18 M, LECUYER POINT, PELTIER CHANNEL, 18-27 M (MHT), FRENCH PASSAGE, 6-40 M (KS).
SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M, MAIVIKEN, LOW TIDE; OFF GRYTVIKEN, 12-20 M (AS); CUMBERLAND EAST BAY, 22-110 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, LOW WATER-20 M, PAAL HARBOUR, 5-25 M, NORMANNA STRAIT, OFF BALIN POINT, 37-55 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, PORT FOSTER, 5-60 M (KHB).
TRINITY PENINSULA: PAULET ISLAND, 100-150 M (AS); HOPE BAY, GRUNDEN ROCK, LITTORAL (MHT).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, PORT CIRCUMCISION, 5 M, LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: LOW TIDE-385 M.

PROSTEBBINGIA SERRATA SCHELLENBERG

PROSTEBBINGIA SERRATA SCHELLENBERG, 1926A:358, FIG. 54.
PONTOGENEIA MAGELLANICA. WALKER, 1907:33, PL. 12, FIG. 20.
PROSTEBBINGIA SERRATA. J.L.BARNARD, 1958B:125.
PROSTEBBINGIA SERRATA. BELLAN-SANTINI, 1972A:187, PL. 13.
PROSTEBBINGIA SERRATA. BELLAN-SANTINI, 1972B:688.
PROSTEBBINGIA SERRATA. THURSTON, 1974B:39.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 10-90 M; CAPE GEODESIE, 70-110 M (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M; 65 47 S 88 E, 400 M (AS).
MARGUERITE BAY: STONINGTON ISLAND, 64 M (MHT).
ROSS SEA: WINTER QUARTERS BAY, HUT POINT; TENT ISLAND (AOW).

DEPTH RANGE: 10-400 M.

RHACHOTROPIS ANOCULATUS J.L.BARNARD

RHACHOTROPIS ANOCULATUS J.L.BARNARD, 1962D:68, FIGS. 64,65, TABLE 10.

DISTRIBUTION: EAST SCOTIA BASIN: 55 19 S 37 57 W, 3725 M (JLB).

RHACHOTROPIS ANTARCTICA K.H.BARNARD

RHACHOTROPIS ANTARCTICA K.H.BARNARD, 1932:194.
RHACHOTROPIS ANTARCTICA. J.L.BARNARD, 1957:15, (KEY).
RHACHOTROPIS ANTARCTICA. J.L.BARNARD, 1958B:41.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
FALKLAND ISLANDS: EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-500 M; NEUMAYER CHANNEL, 259 M; BISMARCK STRAIT, 90-130 M (KHB).
SOUTH GEORGIA: STROMNESS HARBOUR, 155-178 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, 244-344 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 90-500 M.

RHACHOTROPIS HUNTERI NICHOLLS

RHACHOTROPIS HUNTERI NICHOLLS, 1938:98, FIG. 51.
RHACHOTROPIS HUNTERI. J.L.BARNARD, 1957:15, (KEY).
RHACHOTROPIS HUNTERI. J.L.BARNARD, 1958B:41.

DISTRIBUTION: DAVIS SEA: 216 M (GEN).

RHACHOTROPIS KERGUELENI STEBBING

RHACHOTROPIS KERGUELENI STEBBING, 1888:955, PL. 85.
ACANTHOZONE KERGUELENI. DELLA VALLE, 1893:612, PL. 59, FIG. 24.
RHACHOTROPIS KERGUELENI. STEBBING, 1906:349.
RHACHOTROPIS KERGUELENI. K.H.BARNARD, 1916:178.
RHACHOTROPIS KERGUELENI. J.L.BARNARD, 1957:15, (KEY).
RHACHOTROPIS KERGUELENI. J.L.BARNARD, 1958B:42.

DISTRIBUTION: KERGUELEN ISLANDS: (TRRS).

EXTRINSIC DISTRIBUTION: SOUTH AFRICA.

RHACHOTROPIS SPECIES

RHACHOTROPIS SPEC. SCHELLENBERG, 1931:173.

DISTRIBUTION: MAGELLANIC AREA: HARRIS BAY, 27 M (AS).

SCHRADERIA ACUTICAUDA BELLAN-SANTINI AND LEDOYER

SCHRADERIA ACUTICAUDA BELLAN-SANTINI AND LEDOYER, 1974:669, PL. 17.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, 15 M; BOSSIERE FJORD, 10-15 M (BS&L).

DEPTH RANGE: 10-15 M.

SCHRADERIA BARNARDI THURSTON

SCHRADERIA BARNARDI THURSTON, 1974A:68, FIGS. 28A-R,29A-E.
SCHRADERIA BARNARDI. THURSTON, 1974B:39.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, GOUDIER ISLAND, LOW TIDE (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 20-25 M (MHT).

DEPTH RANGE: LOW TIDE-25 M.

SCHRADERIA DUBIA THURSTON

SCHRADERIA DUBIA THURSTON, 1974A:65, FIGS. 26A-P,27A-G.
SCHRADERIA DUBIA. THURSTON, 1974B:39.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, GOUDIER ISLAND, LOW TIDE-1 M (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 1-20 M (MHT).

DEPTH RANGE: LOW TIDE-20 M.

SCHRADERIA GRACILIS PFEFFER

SCHRADERIA GRACILIS PFEFFER, 1888:141, PL. 2, FIG. 5.
ATYLOIDES SERRATICAUDA. WALKER, 1903A:58, PL. 11, FIG. 90.
ATYLOIDES SERRATICAUDA. CHEVREUX, 1906E:87.
SCHRADERIA GRACILIS. STEBBING, 1906:308.
ATYLOIDES SERRATICAUDA. WALKER, 1907:33.
ATYLOIDES SERRATICAUDA. CHILTON, 1912:497.
ATYLOIDES CALCEOLATA CHILTON, 1912:497, PL. 2, FIGS. 21-23.
ATYLOIDES SERRATICAUDA. CHEVREUX, 1913:179.
? ATYLOIDES SERRATICAUDA. CHILTON, 1913:61.

ATYLOIDES SERRATICAUDA. CHILTON, 1921A:224, (IN PART).
PARAMOERA SERRATICAUDA. MONOD, 1926:57.
PARAMOERA SERRATICAUDA. K.H.BARNARD, 1930:388.
ATYLOIDES GRACILIS. SCHELLENBERG, 1931:193.
SCHRADERIA GRACILIS. K.H.BARNARD, 1932:204, FIGS. 118C,123.
? SCHRADERIA GRACILIS. NICHOLLS, 1938:110, FIGS. 52D,57,58N.
SCHRADERIA GRACILIS. STEPHENSEN, 1938:240.
SCHRADERIA GRACILIS. SHOEMAKER, 1945A:290, FIG. 1.
SCHRADERIA GRACILIS. STEPHENSEN, 1947:63.
SCHRADERIA GRACILIS. J.L.BARNARD, 1958B:125.
SCHRADERIA GRACILIS. BELLAN-SANTINI, 1972A:189.
SCHRADERIA GRACILIS. BELLAN-SANTINI, 1972B:689.
SCHRADERIA GRACILIS. BELLAN-SANTINI AND LEDOYER, 1974:672, PL. 18.
SCHRADERIA GRACILIS. THURSTON, 1974A:58, FIGS. 23A-I,24A-Q,25A-K.
SCHRADERIA GRACILIS. THURSTON, 1974B:40.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 7-108 M (GEN); GEOLOGIE ARCHIPELAGO, 15-40 M; CAPE BIENVENUE, 66 43 S 140 31 E, 4-6 M; CAPE JULES, 66 44 S 140 55 E, 15-20 M (DBS).
CROZET ISLANDS: POSSESSION ISLAND (KS), NAVIRE BAY (BS&L).
KERGUELEN ISLANDS: MORBIHAN BAY, CHAT ISLAND, SUHM ISLAND, 90-106 M (BS&L).
MARGUERITE BAY: STONINGTON ISLAND, 18-64 M (MHT).
PALMER ARCHIPELAGO: PORT LOCKROY, 6-90 M (KS), GOUDIER ISLAND, LOW TIDE-1 M, LECUYER POINT, PELTIER CHANNEL, 18-27 M (MHT); NENY FJORD; MELCHIOR HARBOUR; 'EAST BASE' (CRS); FLANDRES BAY; NEUMAYER CHANNEL, 129 M (EC).
ROSS SEA: CAPE WADWORTH, 14-27 M; CAPE ADARE, BEACH-36 M (AOW), 82-92 M (KHB).
SOUTH GEORGIA: (GP); JASON HARBOUR, 10-15 M; CUMBERLAND BAY, 75 M; OFF GRYTVIKEN, 12-310 M (AS); CUMBERLAND EAST BAY, 17-38 M; STROMNESS HARBOUR, 26-178 M; 53 52 S 36 08 W, 160 M; UNDINE HARBOUR, 18-27 M; LARSEN HARBOUR, DRYGALSKI FJORD, 2 M; CUMBERLAND WEST BAY, 110 M (KHB), JASON HARBOUR, 20 M; COAL HARBOUR, 16-19 M (KS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, SHORE-18 M (CC); SIGNY ISLAND, BORGE BAY, 1-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 50-75 M (KS), 5-18 M (MHT).
TRINITY PENINSULA: SEYMOUR ISLAND, 200 M; 64 20 S 56 38 W (AS).

DEPTH RANGE: SHORE-310 M.

SCHRADERIA SERRATICAUDA (STEBBING)

ATYLOIDES SERRATICAUDA STEBBING, 1888:920, PL. 78.
ATYLUS SERRATICAUDA. DELLA VALLE, 1893:702.
ATYLOIDES SERRATICAUDA. STEBBING, 1906:362,729.
LEPTAMPHOPUS SERRATICAUDA. VANHOFFEN, 1907:510.
ATYLOIDES SERRATICAUDA. CHILTON, 1909A:627.
ATYLOIDES SERRATICAUDA. STEBBING, 1910A:640.
ATYLOIDES SERRATICAUDA. CHILTON, 1921A:224, (IN PART, PART =SCHRADERIA GRACILIS).
PARAMOERA SERRATICAUDA. STEPHENSEN, 1927:339.
SCHRADERIA SERRATICAUDA. K.H.BARNARD, 1932:205.
? SCHRADERIA SERRATICAUDA. NICHOLLS, 1938:114, FIG. 52E, (QUESTIONED BY J.L.BARNARD, 1972C).
SCHRADERIA SERRATICAUDA. J.L.BARNARD, 1958B:125.
SCHRADERIA SERRATICAUDA. J.L.BARNARD, 1972C:95.
SCHRADERIA SERRATICAUDA. THURSTON, 1974A:68.
NOT ATYLOIDES SERRATICAUDA. WALKER, 1903A:58, PL. 11, FIG. 90, (=SCHRADERIA GRACILIS).
NOT ATYLOIDES SERRATICAUDA. CHEVREUX, 1906E:87, (=SCHRADERIA GRACILIS).
NOT ATYLOIDES SERRATICAUDA. WALKER, 1907:33, (=SHRADERIA GRACILIS).
NOT ATYLOIDES SERRATICAUDA. CHILTON, 1912:497, (=SCHRADERIA GRACILIS).
NOT ATYLOIDES SERRATICAUDA. CHEVREUX, 1913:179, (=SCHRADERIA GRACILIS).
NOT ATYLOIDES SERRATICAUDA. CHILTON, 1913:61, (=SCHRADERIA GRACILIS).
NOT PARAMOERA SERRATICAUDA. MONOD, 1926:57, (=SCHRADERIA GRACILIS).
NOT PARAMOERA SERRATICAUDA. K.H.BARNARD, 1930:388, (=SCHRADERIA GRACILIS).

DISTRIBUTION: AUCKLAND ISLANDS: MASKED ISLAND, ROCKY COAST; CARNLEY HARBOUR, SHORE (KS), (CC).
MACQUARIE ISLAND: (GEN).

EXTRINSIC DISTRIBUTION: AUSTRALIA.

STENOPLEURA ATLANTICA STEBBING

STENOPLEURA ATLANTICA STEBBING, 1888:950, PL. 84.
ACANTHOZONE ATLANTICA. DELLA VALLE, 1893:601, PL. 59, FIG. 10.
STENOPLEURA ATLANTICA. CHEVREUX, 1905C:7.
STENOPLEURA ATLANTICA. STEBBING, 1906:302.

STENOPLEURA ATLANTICA. WALKER, 1909:332.
STENOPLEURA ATLANTICA. STEPHENSEN, 1915:45, FIG. 27.
STENOPLEURA ATLANTICA. SCHELLENBERG, 1926A:353.
STENOPLEURA ATLANTICA. SCHELLENBERG, 1926B:227.
STENOPLEURA ATLANTICA. PIRLOT, 1929:9.
STENOPLEURA ATLANTICA. K.H.BARNARD, 1932:161.
STENOPLEURA ATLANTICA. SHOEMAKER, 1945B:195.
STENOPLEURA ATLANTICA. REID, 1951:233,287.
STENOPLEURA ATLANTICA. SCHELLENBERG, 1955:194.
STENOPLEURA ATLANTICA. J.L.BARNARD, 1958B:34.
STENOPLEURA ATLANTICA. BIRSTEIN AND VINOGRADOV, 1958:243, FIGS. 12,16.
STENOPLEURA ATLANTICA. BIRSTEIN AND VINOGRADOV, 1960:220,227,230.
STENOPLEURA ATLANTICA. J.L.BARNARD, 1962D:64, FIGS. 60,61, TABLES 7A,10.
STENOPLEURA ATLANTICA. SANDERSON, 1973:7.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 380 M (AS).

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

TYLOSAPIS DENTATUS (STEBBING)

ATYLOPSIS DENTATUS STEBBING, 1888:929, PL. 80.
ATYLOPSIS DENTATA. STEBBING, 1906:299.
ATYLOPSIS DENTATA. SCHELLENBERG, 1931:178, FIG. 91.
ATYLOPSIS DENTATA. J.L.BARNARD, 1958B:32.
ATYLOPSIS DENTATUS. THURSTON, 1974A:54, (KEY).
TYLOSAPIS DENTATUS. THURSTON, 1974B:40, (KEY).

DISTRIBUTION: BURDWOOD BANK: 53 45 S 61 10 W, 137-150 M (AS).
FALKLAND ISLANDS: PORT WILLIAM, 22 M; PORT STANLEY; BERKELEY SOUND, 16 M; PORT ALBEMARLE, 15-40 M; 52 29 S 60 36 W, 197 M (AS).
MAGELLANIC AREA: CAPE VALENTINA, 270 M; SMYTH CHANNEL, 14 M; USHUAIA BAY, 4-27 M; BEAGLE CHANNEL, 100 M; 'MARTHA BANK', 180 M; PICTON ISLAND, 5 M; ULTIMA ESPERANZA, 13-18 M (AS); CAPE VIRGENES, 99 M (TRRS).

DEPTH RANGE: 4-270 M.

ZARAMILLA KERGUELENI STEBBING

ZARAMILLA KERGUELENI STEBBING, 1888:867, PL. 66.
ZARAMILLA KERGUELENI. STEBBING, 1906:361.
ZARAMILLA KERGUELENI. J.L.BARNARD, 1958B:125.
ZARAMILLA KERGUELENI. BELLAN-SANTINI AND LEDOYER, 1974:674, PL. 19, FIG. 18.

DISTRIBUTION: KERGUELEN ISLANDS: SURFACE (TRRS); MORBIHAN BAY, LOW TIDE; PORT AUX FRANCAIS, LOW TIDE; PORT BIZET, LOW TIDE; LAROSE FJORD, LOW TIDE; CHRISTMAS HARBOUR (BS&L).

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GAMMARIDAE

CERADOCOIDES CHILTONI NICHOLLS

CERADOCOIDES CHILTONI NICHOLLS, 1938:123, FIG. 63.
CERADOCOIDES CHILTONI. SHEARD, 1939:277, FIG. 5N-O.
CERADOCOIDES CHILTONI. J.L.BARNARD, 1958B:45.
? CERADOCOIDES CHILTONI. SIVAPRAKASAM, 1966:109, FIG. 11.
? CERADOCOIDES CHILTONI. SURYA RAO, 1974:194.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 414 M (GEN).

EXTRINSIC DISTRIBUTION: ? INDIA.

CERADOCOPSIS KERGUELENI SCHELLENBERG

CERADOCOPSIS KERGUELENI SCHELLENBERG, 1926A:365, FIG. 56.
CERADOCOPSIS KERGUELENI. J.L.BARNARD, 1958B:45.
CERADOCOPSIS KERGUELENI. BELLAN-SANTINI AND LEDOYER, 1974:674, PL. 19, FIGS. 1-17.

DISTRIBUTION: KERGUELEN ISLANDS: (AS); MORBIHAN BAY, LOW TIDE-15 M, CHAT ISLAND, BOSSIERE FJORD, 10-15 M (BS&L).

DEPTH RANGE: LOW TIDE-15 M.

MAERA CARNLEYI (STEPHENSEN)

ELASMOPUS CARNLEYI STEPHENSEN, 1927:342, FIGS. 19,20.
MAERA CARNLEYI. HURLEY, 1954B:603, (KEY).
MAERA CARNLEYI. J.L.BARNARD, 1958B:59.
MAERA CARNLEYI. J.L.BARNARD, 1962B:100, (KEY).
MAERA CARNLEYI. J.L.BARNARD, 1972C:105.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND, LOW TIDE (KS).

MAERA EUGENIAE SCHELLENBERG

MAERA EUGENIAE SCHELLENBERG, 1931:203, FIG. 103.
MAERA EUGENIAE. J.L.BARNARD, 1958B:59.
MAERA EUGENIAE. J.L.BARNARD, 1962B:99, (KEY).

DISTRIBUTION: MAGELLANIC AREA: CAPE VIRGENES, 58 M (AS).

MAERA INCERTA CHILTON

MOERA INCERTA CHILTON, 1883:83, PL. 3, FIG. 3.
MOERA INCERTA. THOMSON AND CHILTON, 1886:147.
? ELASMOPUS VIRIDIS. STEPHENSEN, 1927:342, (QUESTIONED BY J.L.BARNARD, 1972C).
MAERA VIRIDIS. HURLEY, 1954B:603, (KEY).
MAERA INCERTA. J.L.BARNARD, 1972C:30,105, FIG. 54, (KEY).
MAERA INCERTA. LOWRY, 1974:112,125, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, LOW TIDE; MASKED ISLAND (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

MAERA PFEFFERI K.H.BARNARD

MAERA PFEFFERI K.H.BARNARD, 1932:212, FIG. 131.
MAERA PFEFFERI. J.L.BARNARD, 1958B:60.
MAERA PFEFFERI. J.L.BARNARD, 1962B:100, (KEY).

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 230-250 M; STROMNESS HARBOUR, 155-178 M; 53 51 S 36 18 W, 245 M; 53 51 S 36 21 W, 200-236 M; 53 52 S 36 08 W, 160 M (KHB).

DEPTH RANGE: 155-250 M.

MELITA INAEQUISTYLIS DANA

AMPHITOE (MELITA) INAEQUISTYLIS DANA, 1852:214.
AMPHITOE TENUICORNIS DANA, 1852:215.
MELITA TENUICORNIS. DANA, 1853-55:963, PL. 66, FIGS. 5A-M.
MOERA TENUICORNIS. BATE, 1862:195, PL. 35, FIG. 6.
PARAMOERA TENUICORNIS. MIERS, 1875A:75.
PARAMOERA TENUICORNIS. MIERS, 1876:127, PL. 3, FIG. 8.
PARAMOERA TENUICORNIS. THOMSON, 1879A:241, PL. 10, FIG. C5.
MELITA TENUICORNIS. THOMSON, 1880A:5.
MELITA TENUICORNIS. THOMSON, 1880B:218.
MELITA TENUICORNIS. THOMSON AND CHILTON, 1886:147.
MELITA TENUICORNIS. THOMSON, 1889:261.
MELITA PALMATA. DELLA VALLE, 1893:713, (IN PART).
MELITA TENUICORNIS. HUTTON, 1904:260.
? MELITA TENUICORNIS. CHILTON, 1906B:271, (QUESTIONED BY J.L.BARNARD, 1972C).
MELITA INAEQUISTYLIS. STEBBING, 1906:429,732.
MELITA INAEQUISTYLIS. CHILTON, 1909A:630.
? MELITA INAEQUISTYLIS. CHILTON, 1911B:564, (QUESTIONED BY J.L.BARNARD, 1972C).
MELITA INAEQUISTYLIS. THOMSON, 1913:243.

? MELITA INAEQUISTYLIS. CHILTON, 1925B:317, (QUESTIONED BY J.L.BARNARD, 1972C).
? MELITA INAEQUISTYLIS. STEPHENSEN, 1927:345, (QUESTIONED BY J.L.BARNARD, 1972C).
MELITA INAEQUISTYLIS. K.H.BARNARD, 1932:212.
MELITA INAEQUISTYLIS. J.L.BARNARD, 1958B:62.
MELITA INAEQUISTYLIS. J.L.BARNARD, 1962B:106-108, TABLE 2, (KEY).
MELITA INAEQUISTYLIS. J.L.BARNARD, 1972C:29,117, FIGS. 61I-O,62J-L,64, (KEY).
MELITA INAEQUISTYLIS. LOWRY, 1974:112,125, FIGS. 9E,C, (KEY).
MELITA INAEQUISTYLIS. SURYA RAO, 1974:196.
NOT MAERA TENUICORNIUS. WALKER, 1904:273, PL. 5, FIG. 33.
NOT MELITA INAEQUISTYLIS. STEBBING, 1914:366.
NOT MELITA INAEQUISTYLIS. K.H.BARNARD, 1916:191.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR (CC), SHORE (KS).

EXTRINSIC DISTRIBUTION: CHATHAM ISLANDS; KERMADEC ISLANDS; INDIA; NEW ZEALAND.

PARACERADOCUS MIERSII (PFEFFER)

MEGAMOERA MIERSII PFEFFER, 1888:121, PL. 3, FIG. 3.
MEGAMAERA MIERSII. DELLA VALLE, 1893:732.
PARACERADOCUS MIERSII. STEBBING, 1899C:426.
PARACERADOCUS MIERSI. CHEVREUX, 1906E:93.
PARACERADOCUS MIERSII. STEBBING, 1906:429.
PARACERADOCUS MIERSII. CHILTON, 1912:500.
PARACERADOCUS MIERSI. CHEVREUX, 1913:180.
PARACERADOCUS MIERSI. CHILTON, 1913:59.
PARACERADOCUS MIERSII. CHILTON, 1925A:179.
PARACERADOCUS MIERSI. SCHELLENBERG, 1931:202.
PARACERADOCUS MIERSII. K.H.BARNARD, 1932:215, FIG. 133.
PARACERADOCUS MIERSI. STEPHENSEN, 1938:240.
PARACERADOCUS MIERSII. STEPHENSEN, 1947:65.
PARACERADOCUS MIERSI. J.L.BARNARD, 1958B:69.
PARACERADOCUS MIERSII. BELLISIO, 1966:52, PL. 26.
PARACERADOCUS MIERSI. THURSTON, 1974A:87.
PARACERADOCUS MIERSII. THURSTON, 1974B:40.

DISTRIBUTION: MARGUERITE BAY: DION ISLANDS, 9 M (MHT).
PALMER ARCHIPELAGO: NEUMAYER CHANNEL, 60-70 M (EC).
SOUTH GEORGIA: (GP); CUMBERLAND BAY, 252-310 M (AS), 230-250 M, OFF 'JASON LIGHT', 238-270 M (KHB); COAL BAY, INTERTIDAL (KS).
SOUTH ORKNEY ISLANDS: 16-18 M (CC); SIGNY ISLAND, 244-344 M (KHB), BORGE BAY, LITTORAL-20 M (MHT).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 55-91 M (KS), 55-91 M (MHT).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY (EC).
TRINITY PENINSULA: PAULET ISLAND, 100-150 M (AS); HOPE BAY, HUT COVE, 9 M, GRUNDEN ROCK, LOW TIDE (MHT).
WILHELM ARCHIPELAGO: PORT CHARCOT; BOOTH ISLAND; HOVGAARD ISLAND; PETERMANN ISLAND (EC).

DEPTH RANGE: LITTORAL-344 M.

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HAUSTORIIDAE

CARDENIO PAURODACTYLUS STEBBING

CARDENIO PAURODACTYLUS STEBBING, 1888:806, PL. 53.
CARDENIO PAURODACTYLUS. DELLA VALLE, 1893:750, PL. 60, FIGS, 20,21.
CARDENIO PAURODACTYLUS. STEBBING, 1906:126.
CARDENIO PAURODACTYLUS. SCHELLENBERG, 1926B:195.
CARDENIO PAURODACTYLUS. K.H.BARNARD, 1932:91, FIG. 43.
CARDENIO PAURODACTYLUS. STEPHENSEN, 1947:37.
CARDENIO PAURODACTYLUS. J.L.BARNARD, 1958B:77.
CARDENIO PAURODACTYLUS. THURSTON, 1974B:41.

DISTRIBUTION: BOUVET ISLAND: 0-70 M (KS).
KERGUELEN ISLANDS: (AS); BETSY COVE (TRRS).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 39 M (KHB).
SOUTH ORKNEY ISLANDS: NORMANNA STRAIT, 24-36 M (KHB).
SOUTH SHETLAND ISLANDS: VISOKOI ISLAND, 10-17 M (KS); DECEPTION ISLAND (MHT).

DEPTH RANGE: 0-70 M.

PHOXOCEPHALOPSIS DECEPTIONIS STEPHENSEN

PHOXOCEPHALOPSIS DECEPTIONIS STEPHENSEN, 1947:38, FIGS. 12-14.
PHOXOCEPHALOPSIS DECEPTIONIS. J.L.BARNARD, 1958B:77.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 30 M (KS).

PHOXOCEPHALOPSIS ZIMMERI SCHELLENBERG

PHOXOCEPHALOPSIS ZIMMERI SCHELLENBERG, 1931:70, FIG. 36.
HAUSTORIELLA PSAMMOPHILA K.H.BARNARD, 1931A:426.
PHOXOCEPHALOPSIS ZIMMERI. K.H.BARNARD, 1932:95, FIGS. 46,47.
PHOXOCEPHALOPSIS ZIMMERI. RUFFO, 1956:115, FIG. 1.
PHOXOCEPHALOPSIS ZIMMERI. J.L.BARNARD, 1958B:77.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M; BERKELEY SOUND, 25-30 M (AS).
MAGELLANIC AREA: PUNTA ARENAS, 4 M (AS).

DEPTH RANGE: 4-40 M.

EXTRINSIC DISTRIBUTION: ARGENTINA; BRAZIL.

UROTHOE FALCATA SCHELLENBERG

UROTHOE FALCATA SCHELLENBERG, 1931:61, FIG. 32.
UROTHOE FALCATA. K.H.BARNARD, 1932:91, FIG. 44.
UROTHOE FALCATA. J.L.BARNARD, 1958B:78.
UROTHOE FALCATA. SANDERSON, 1973:26.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M; 51 00 S 62 02 W, 207 M (KHB).

DEPTH RANGE: 105-207 M.

EXTRINSIC DISTRIBUTION: ARGENTINA.

UROTHOE ONISCOIDES (K.H.BARNARD)

UROTHOIDES ONISCOIDES K.H.BARNARD, 1932:93, FIG. 45.
UROTHOIDES ONISCOIDES. J.L.BARNARD, 1958B:78.
UROTHOE ONISCOIDES. J.L.BARNARD, 1967B:22.

DISTRIBUTION: BRANSFIELD STRAIT: 62 17 S 58 21 W, 720 M (KHB).

UROTHOE VEMAE J.L.BARNARD

UROTHOE VEMAE J.L.BARNARD, 1962D:45, FIG. 34.

DISTRIBUTION: VALDIVIA BASIN: 56 43 S 27 41 W, 2747 M (JLB).

EXTRINSIC DISTRIBUTION: CAPE BASIN.

UROTHOIDES LACHNEESSA (STEBBING)

UROTHOE LACHNEESSA STEBBING, 1888:825, PL. 57.
UROTHOIDES LACHNEESSA. STEBBING, 1891:26.
UROTHOE LACHNEESSA. DELLA VALLE, 1893:667, PL. 60, FIG. 13.
UROTHOIDES LACHNEESSA. STEBBING, 1906:132.
UROTHOIDES LACHNEESSA. CHILTON, 1920:6.
UROTHOIDES LACHNEESSA. SCHELLENBERG, 1926B:195.
UROTHOIDES LACHNEESSA. J.L.BARNARD, 1958B:78.
UROTHOIDES LACHNEESSA. BELLAN-SANTINI AND LEDOYER, 1974:674.

DISTRIBUTION: KERGUELEN ISLANDS: (AS); CUMBERLAND BAY, 216 M (TRRS); MORBIHAN BAY, 15 M, AUSTRALIA ISLAND, 24 M (BS&L).

DEPTH RANGE: 15-216 M.

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

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HYPERIOPSIDAE

HYPERIOPSIS SPECIES

HYPERIOPSIS SP. BIRSTEIN AND VINOGRADOV, 1962A:45.

DISTRIBUTION: SOUTHERN OCEAN: PACIFIC SECTOR, 64 03 S 161 59 E, 0-3000 M (B&V).

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ISCHYROCERIDAE

CERAPUS OPPOSITUS K.H.BARNARD

CERAPUS OPPOSITUS K.H.BARNARD, 1932:245, FIG. 153.
CERAPUS OPPOSITUS. J.L.BARNARD, 1958B:35.
CERAPUS OPPOSITUS. J.L.BARNARD, 1962A:61, (KEY).

DISTRIBUTION: PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 60-110 M (KHB).

DEPTH RANGE: 60-130 M.

CERAPUS SISMITHI STEBBING

CERAPUS SISMITHI STEBBING, 1888:1158, PL. 124.
CERAPUS SISMITHI. DELLA VALLE, 1893:379, PL. 55, FIGS. 53-57.
CERAPUS SISMITHI. SARS, 1895:607.
CERAPUS SISMITHI. STEBBING, 1906:666, FIGS. 112-114.
CERAPUS SISMITHI. J.L.BARNARD, 1958B:35.
CERAPUS SISMITHI. J.L.BARNARD, 1962A:61, (KEY).

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 216 M (TRRS).

ISCHYROCERUS CAMPTONYX THURSTON

ISCHYROCERUS CAMPTONYX THURSTON, 1974A:95, FIGS. 37A-M,38A-K.
JASSA FALCATA. CHILTON, 1912:511, (IN PART, PART =JASSA GONIAMERA).
JASSA FALCATA. K.H.BARNARD, 1932:241, (IN PART).
? ISCHYROCERUS SP. STEPHENSEN, 1947:75, (QUESTIONED BY THURSTON, 1974A).

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, 90 M (KS).
SOUTH GEORGIA: CUMBERLAND EAST BAY (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY; MACDOUGAL BAY (CC); SIGNY ISLAND, BORGE BAY, 3-15 M, PAAL HARBOUR, 5-15 M (MHT).

DEPTH RANGE: 3-90 M.

ISCHYROCERUS LONGIMANUS (HASWELL)

WYVILLEA LONGIMANUS HASWELL, 1880A:337, PL. 22, FIG. 7.
PODOCERUS CYLINDRICUS. KIRK, 1879:402.
WYVILLEA LONGIMANUS. HASWELL, 1882:261.
PODOCERUS LONGIMANUS. CHILTON, 1884A:255, PL. 17, FIGS. 2A-E.
PODOCERUS LONGIMANUS. CHILTON, 1884B:1044.
PODOCERUS LONGIMANUS. THOMSON AND CHILTON, 1886:143.
WYVILLEA LONGIMANA. STEBBING, 1906:648.
ISCHYROCERUS ANGUIPES. CHILTON, 1921A:227.
? WYVILLEA LONGIMANA. STEPHENSEN, 1927:353, (QUESTIONED BY J.L.BARNARD, 1972C).
ISCHYROCERUS ANGUIPES VAR. LONGIMANUS. K.H.BARNARD, 1930:393.
? ISCHYROCERUS ANGUIPES VAR. LONGIMANUS. K.H.BARNARD, 1932:243, (QUESTIONED BY J.L.BARNARD, 1972C).
? ISCHYROCERUS LONGIMANUS. STEPHENSEN, 1949:45.
ISCHYROCEROS LONGIMANUS. MACNAE, 1953:1032.
ISCHYROCERUS LONGIMANUS. J.L.BARNARD, 1958B:84.
ISCHYROCERUS LONGIMANUS. K.H.BARNARD, 1965:208.
ISCHYROCERUS LONGIMANUS. J.L.BARNARD, 1972C:27,133, FIG. 73, (KEY).
ISCHYROCERUS LONGIMANUS. LOWRY, 1974:113,126, FIG. 10E, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, LOW TIDE (KS).

EXTRINSIC DISTRIBUTION: AUSTRALIA; GOUGH ISLAND; NEW ZEALAND; TRISTAN DA CUNHA.

JASSA FALCATA (MONTAGU)

CANCER GAMMARUS FALCATUS MONTAGU, 1808:100, PL. 5, FIG. 2.
ASTACUS FALCATUS. PENNANT, 1812:34.
JASSA PULCHELLA LEACH, 1814B:433.
JASSA PULCHELLA. LEACH, 1815:361.
PODOCERUS CYLINDRICUS. MILNE EDWARDS, 1830:384.
PODOCERUS PELAGICUS. MILNE EDWARDS, 1830:384.
PODOCERUS PULCHELLUS. MILNE EDWARDS, 1830:384.
PODOCERUS VARIEGATUS. MILNE EDWARDS, 1830:384.
CERAPUS PELAGICUS. MILNE EDWARDS, 1840:61.
PODOCERUS PULCHELLA. MILNE EDWARDS, 1840:61.
JASSA FALCATA. WHITE, 1850:54.
PODOCERUS FALCATUS. BATE, 1862:255, PL. 44, FIG. 1.
PODOCERUS PULCHELLUS. BATE AND WESTWOOD, 1863,1868:436, (VOL. 1) FIG.
PODOCERUS VARIEGATUS. BATE AND WESTWOOD, 1863,1868:439, (VOL. 1), FIG.
PODOCERUS FALCATUS. BATE AND WESTWOOD, 1863,1868:445, (VOL. 1), FIG.
PODOCERUS PELAGICUS. BATE AND WESTWOOD, 1863,1868:447, (VOL. 1), FIG.
PODOCERUS CALIFORNICUS BOECK, 1871:41, PL. 1, FIG. 6.
PODOCERUS FALCATUS. BOECK, 1876:605, PL. 27, FIGS. 4,7, PL. 28, FIG. 2.
PODOCERUS AUSTRALIS HASWELL, 1880B:338, PL. 21, FIG. 8.
PODOCERUS AUSTRALIS. HASWELL, 1882:270.
PODOCERUS FALCATUS. SARS, 1882:112.
PODOCERUS FALCATUS. BLANC, 1884:79, PL. 4, FIGS. 96-101.
PODOCERUS AUSTRALIS. MIERS, 1884:319.
PODOCERUS VALIDUS. THOMSON AND CHILTON, 1886:143.
PODOCERUS FALCATUS. STEBBING, 1888:1132, PL. 119.
PODOCERUS FALCATUS. CHEVREUX AND BOUVIER, 1893:137.
PODOCERUS FALCATUS. SARS, 1895:594, PL. 212.
PODOCERUS ODONTONYX SARS, 1895:597, PL. 212, FIG. 2.
PODOCERUS FALCATUS. WALKER, 1895A:313, PL. 19, FIG. 20.
PODOCERUS HERDMANI. WALKER, 1895A:314.
PODOCERUS VARIEGATUS. WALKER, 1895A:315, PL. 19, FIG. 21.
PODOCERUS FALCATUS. WALKER, 1895B:472.
PODOCERUS PULCHELLUS. WALKER, 1895B:472.
PODOCERUS VARIEGATUS. WALKER, 1895B:472.
PODOCERUS HERDMANI. WALKER, 1895B:473.
PODOCERUS PELAGICUS. WALKER, 1895B:473.
PODOCERUS FALCATUS. CHEVREUX, 1898:482.
PODOCERUS FALCATUS. WALKER, 1898:170.
JASSA PULCHELLA. STEBBING, 1899A:239.
JASSA DENTEX. STEBBING, 1899B:350.
PODOCERUS HERDMANI. STEBBING, 1899B:350.
PODOCERUS ODONTONYX. STEBBING, 1899B:350.
JASSA FALCATA. WALKER, 1899:395.
PODOCERUS FALCATUS. CHEVREUX, 1900:106.
JASSA FALCATA. CHEVREUX, 1900:106.
JASSA FALCATA. WALKER, 1904:292, PL. 7, FIG. 47.
JASSA WANDELI CHEVREUX, 1906E:94, FIGS. 54-56.
JASSA FALCATA. STEBBING, 1906:656.
JASSA CALIFORNICA. STEBBING, 1906:656.
JASSA PULCHELLA. CHILTON, 1909A:647.
JASSA PULCHELLA. STEBBING, 1910A:649.
JASSA PULCHELLA. STEBBING, 1910B:462.
JASSA FALCATA. SEXTON, 1911:212, FIG. 10.
JASSA FALCATA. WALKER, 1911:67, FIGS. A-H.
JASSA FALCATA. CHILTON, 1912:511, (IN PART, PART =ISCHYROCERUS CAMPTONYX, AND JASSA GONIAMERA).
JASSA WANDELI. CHEVREUX, 1913:181, FIG. 61.
JASSA FALCATA. CHILTON, 1913:60, (IN PART, PART =JASSA INGENS).
JASSA PULCHELLA. THOMSON, 1913:245.
JASSA FALCATUS. STEBBING, 1914:371.
JASSA FALCATA. K.H.BARNARD, 1916:262.
JASSA FALCATA. CHILTON, 1921A:225.
JASSA FALCATA. CHILTON, 1921C:89.
JASSA FALCATA. CHEVREUX AND FAGE, 1925:344, FIGS. 352,353, (KEY).
JASSA DENTEX. CHEVREUX AND FAGE, 1925:344,348, FIG. 356, (KEY).
JASSA FALCATA. MONOD, 1926:61, FIG. 58.
JASSA FALCATA. SCHELLENBERG, 1926A:383, (IN PART, PART =JASSA GONIAMERA).
JASSA FALCATA. SCHELLENBERG, 1927:718, FIG. 102.
JASSA PULCHELLA. STEPHENSEN, 1927:354.
IASSA FALCATA. SCHELLENBERG, 1928B:668.
JASSA FALCATA. SCHELLENBERG, 1931:250, FIG. 130.
JASSA FALCATA. K.H.BARNARD, 1932:241, (IN PART, PART =ISCHYROCERUS CAMPTONYX).
JASSA FALCATA. SCHELLENBERG, 1935:233.
JASSA FALCATA. NICHOLLS, 1938:127.
? JASSA PULCHELLA. STEPHENSEN, 1938:262, (QUESTIONED BY J.L.BARNARD, 1972C).
JASSA FALCATA. K.H.BARNARD, 1940:519.
JASSA ? WANDELI. STEPHENSEN, 1947:74.
JASSA PULCHELLA. GURJANOVA, 1951:908, FIGS. 628,629.

JASSA FALCATA. REID, 1951:266,279,281,289, FIG. 56.
JASSA FALCATA. SEXTON AND REID, 1951:29-91, PLS. 4-30, (IN PART).
JASSA FALCATA. J.L.BARNARD, 1952:28.
JASSA FALCATA. J.L.BARNARD, 1958B:85.
JASSA FALCATA. J.L.BARNARD AND REISH, 1959:36.
JASSA FALCATA. J.L.BARNARD, 1964A:118.
JASSA FALCATA. J.L.BARNARD, 1969B:155, FIGS. 38,39.
JASSA FALCATA. DAY, ET. AL., 1970:54.
JASSA FALCATA. J.L.BARNARD, 1971B:97.
JASSA FALCATA. J.L.BARNARD, 1972C:27,135, (KEY).
JASSA FALCATA. BELLAN-SANTINI, 1972A:191.
JASSA FALCATA. BELLAN-SANTINI, 1972B:689.
JASSA FALCATA. BOUSFIELD, 1973:190, PL. 58.
JASSA FALCATA. SANDERSON, 1973:30.
JASSA PULCHELLA. SANDERSON, 1973:32.
JASSA FALCATA. BELLAN-SANTINI AND LEDOYER, 1974:677, (PROBABLY =JASSA INGENS).
JASSA FALCATA. GRIFFITHS, 1974A:196.
JASSA FALCATA. GRIFFITHS, 1974B:245.
JASSA FALCATA. GRIFFITHS, 1974C:300.
JASSA FALCATA. LOWRY, 1974:113,126, FIG. 10F, (KEY).
JASSA FALCATA. THURSTON, 1974A:100, FIGS. 39A-H.
JASSA FALCATA. THURSTON, 1974B:46.
NOT JASSA FALCATA. K.H.BARNARD, 1930:392, (=VENTOJASSA GEORGIANA).

DISTRIBUTION: ADELIE COAST: CAPE JULES, 66 44 S 140 55 E, 15-20 M; CAPE GEODESIE, 115-140 M; GEOLOGIE ARCHIPELAGO, 110-130 M (DBS).
AUCKLAND ISLANDS: (CC); CARNLEY HARBOUR, MASKED ISLAND, ROCKY COAST (KS).
BURDWOOD BANK: 137-150 M (AS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR (KS).
CROZET ISLANDS: POSSESSION ISLAND, NAVIRE BAY; EAST ISLAND, ADVENTURE BAY (BS&L).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
FALKLAND ISLANDS: PORT ALBEMARLE, 18-30 M; PORT WILLIAM, 40 M; PORT LOUIS, 7 M (AS); PORT STANLEY, LOW TIDE (TRRS).
KERGUELEN ISLANDS: ROYAL SOUND; OBSERVATORY BAY (AS); GREENLAND HARBOUR, 54 M (TRRS); MORBIHAN BAY, MOLLOY POINT, 6-8 M; PORT JEANNE-D'ARC, 14-17 M; LABOUREUR SOUND, 10-35 M; JOLIETTE COVE, 10-54 M; CHAT ISLAND; BOSSIERE FJORD, 10-15 M; PORT AUX FRANCAIS, 1-3 M; PORT BIZET, LOW TIDE; BAUDISSIN SOUND, 3 M; PORT DOUZIEME, LITTORAL; ROYAL SOUND, 29 M (BS&L).
MACQUARIE ISLAND: AERIAL COVE; NORTH END; GARDEN BAY, LOW TIDE; SOUTH EAST HARBOUR (GEN).
MAGELLANIC AREA: PUERTO PANTALON; USHUAIA BAY; YORK BAY; SMYTH CHANNEL, 14 M (AS).
PALMER ARCHIPELAGO: PORT LOCKROY, GOUDIER ISLAND, LOW TIDE-1 M (MHT).
SHAG ROCKS: 160 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY; JASON HARBOUR (AS); CUMBERLAND EAST BAY (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY; MACDOUGAL BAY (CC); NORMANNA STRAIT, 24-36 M (KHB); SIGNY ISLAND, BORGE BAY, LITTORAL-20 M, PAAL HARBOUR, 5-25 M (MHT).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 10-17 M (KS).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT).
TRINITY PENINSULA: HOPE BAY, 37-55 M, GRUNDEN ROCK, LITTORAL (MHT).
WEDDELL SEA: 71 50 S 23 30 W, 0-1800 M (CC).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, PORT CIRCUMCISION, 6 M; BOOTH ISLAND (EC); ARGENTINE ISLANDS, SHELTER ISLANDS, LITTORAL (MHT).

DEPTH RANGE: LITTORAL-1800 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

JASSA GONIAMERA WALKER

JASSA GONIAMERA WALKER, 1903A:61, PL. 11, FIGS. 98-106A, (IN PART, PART =VENTOJASSA GEORGIANA).
JASSA GONIAMERA. STEBBING, 1906:739.
HEMIJASSA GONIAMERA. WALKER, 1907:38.
JASSA FALCATA. CHILTON, 1912:511, (IN PART, PART =ISCHYROCERUS CAMPTONYX).
JASSA FALCATA. SCHELLENBERG, 1926A:383, (IN PART).
JASSA GONIAMERA. SCHELLENBERG, 1931:253.
JASSA INGENS. K.H.BARNARD, 1932:242, FIG. 151C, (IN PART).
JASSA GONIAMERA. NICHOLLS, 1938:128.
JASSA GONIAMERA. STEPHENSEN, 1947:73, FIG. 24.
JASSA FALCATA. SEXTON AND REID, 1951:72,75,77-78,81-83,85,86.
JASSA GONIAMERA. J.L.BARNARD, 1958B:85.
JASSA GONIAMERA. THURSTON, 1974A:100.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 99-108 M (GEN).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
ROSS SEA: CAPE ADARE, 43 M; COULMAN ISLAND, 180 M; WINTER QUARTERS BAY, 'FLAGON POINT', 10-20 M (AOW).

SOUTH ORKNEY ISLANDS: SCOTIA BAY; MACDOUGAL BAY (CC).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 10-17 M (KS).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).
TRINITY PENINSULA: 64 20 S 56 38 W, 150 M; 64 36 S 57 42 W, 125 M (AS).
WEDDELL SEA: 71 50 S 23 30 W, 0-1800 M (CC); 71 02 S 12 W, 220 M (KS).

DEPTH RANGE: 0-1800 M.

JASSA INGENS (PFEFFER)

PODOCERUS INGENS PFEFFER, 1888:131, PL. 3, FIG. 1.
PODOCERUS FALCATUS. DELLA VALLE, 1893:445, (IN PART).
JASSA INGENS. STEBBING, 1906:653.
JASSA FALCATA. CHILTON, 1913:60, (IN PART).
JASSA INGENS. SCHELLENBERG, 1931:249, FIG. 129.
JASSA INGENS. STEPHENSEN, 1938:241.
JASSA INGENS. STEPHENSEN, 1947:71, FIG. 23.
JASSA FALCATA. SEXTON AND REID, 1951:46,64-66,82,86, (NOT PLS. 27-29).
JASSA INGENS. J.L.BARNARD, 1958B:85.
JASSA INGENS. SANDERSON, 1973:31.
JASSA INGENS. THURSTON, 1974A:99.
JASSA INGENS. THURSTON, 1974B:47.
NOT JASSA INGENS. K.H.BARNARD, 1932:242, FIG. 151C, (PART =JASSA GONIAMERA).

DISTRIBUTION: SOUTH GEORGIA: (GP); (MHT); SAINT ANDREWS BAY; CUMBERLAND WEST BAY, JASON HARBOUR, 20 M (KS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 1-20 M, PAAL HARBOUR, 5-15 M, BERNTSEN POINT, 1 M (MHT).
SOUTH SANDWICH ISLANDS: CANDLEMAS ISLANDS (KS), (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 75 M (KS).

DEPTH RANGE: 1-75 M.

JASSA MULTIDENTATA SCHELLENBERG

JASSA MULTIDENTATA SCHELLENBERG, 1931:251, FIG. 131.
JASSA MULTIDENTATA. J.L.BARNARD, 1958B:85.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 1-2 M, 'JASON LIGHT', 10-15 M; OFF GRYTVIKEN, 2-8 M; MORAINE FJORD, 5 M (AS).

DEPTH RANGE: 1-15 M.

JASSA ORNATA (MIERS)

PODOCERUS ORNATUS MIERS, 1875A:75.
PODOCERUS ORNATUS. DELLA VALLE, 1893:454.
PODOCERUS ORNATUS. MIERS, 1879A:210, PL. 11, FIG. 6.
JASSA ORNATA. STEBBING, 1906:657.
JASSA ORNATA. J.L.BARNARD, 1958B:85, (DUBIOUS SPECIES).

DISTRIBUTION: KERGUELEN ISLANDS: SWAINS BAY (EJM).

JASSA SPECIES 1

JASSA SP. STEPHENSEN, 1927:354.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, LOW TIDE (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, LOW TIDE (KS).

JASSA SPECIES 2

JASSA SP. STEPHENSEN, 1947:75.

DISTRIBUTION: KERGUELEN ISLANDS: (KS).
PALMER ARCHIPELAGO: PORT LOCKROY, 90 M (KS).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 25 M (KS).

DEPTH RANGE: 25-90 M.

PSEUDERICTHONIUS GAUSSI SCHELLENBERG

PSEUDERICTHONIUS GAUSSI SCHELLENBERG, 1926A:385, FIG. 66.
PSEUDERICHTHONIUS GAUSSI. K.H.BARNARD, 1932:245.
PSEUDERICTHONIUS GAUSSI. J.L.BARNARD, 1958B:37.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 200-385 M.

PSEUDISCHYROCERUS DENTICAUDA SCHELLENBERG

PSEUDISCHYROCERUS DENTICAUDA SCHELLENBERG, 1931:254, FIG. 132.
PSEUDISCHYROCERUS DENTICAUDA. J.L.BARNARD, 1958B:85.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, 7 M (AS).
MAGELLANIC AREA: NUEVA ISLAND, 5 M; 'MARTHA BANK', 180 M (AS).

DEPTH RANGE: 5-180 M.

PSEUDISCHYROCERUS DISTICHON (K.H.BARNARD)

EURYSTHEUS DISTICHON K.H.BARNARD, 1930:391, FIG. 50.
PSEUDISCHYROCERUS DISTICHON. SCHELLENBERG, 1931:255, FIG. 133.
EURYSTHEUS DISTICHON. K.H.BARNARD, 1932:227, FIG. 141.
PSEUDISCHRYOCERUS DISTICHON. NICHOLLS, 1938:128, FIG. 66.
EURYSTHEUS DISTICHON. STEPHENSEN, 1947:68, FIG. 22.
PSEUDISCHYROCERUS DISTICHON. J.L.BARNARD, 1958B:85, (DUBIOUS SPECIES).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-108 M (GEN).
BOUVET ISLAND: CAPE LOLLO (KS).
ROSS SEA: CAPE ADARE, 82-92 M (KHB).
SHAG ROCKS: 160 M (AS); 53 43 S 40 57 W, 177 M (KHB).
SOUTH GEORGIA: MAIVIKEN, 75 M; CUMBERLAND BAY, 252-310 M (AS), 120-250 M, 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 155-178 M; 53 52 S 36 08 W, 160 M (KHB).
TRINITY PENINSULA: CAPE ROQUEMAUREL (AS).

DEPTH RANGE: 45-310 M.

VENTOJASSA GEORGIANA (SCHELLENBERG)

PARAJASSA GEORGIANA SCHELLENBERG, 1931:247, FIG. 128.
JASSA GONIAMERA WALKER, 1903A:61, PL. 11, FIGS. 98-106A, (IN PART).
JASSA FALCATA. K.H.BARNARD, 1930:392.
PARAJASSA GEORGIANA. K.H.BARNARD, 1932:243, FIG. 152.
PARAJASSA GEORGIANA. J.L.BARNARD, 1958B:85.
PARAJASSA GEORGIANA. J.L.BARNARD, 1969B:160.
VENTOJASSA GEORGIANA. J.L.BARNARD, 1973A:26.
PARAJASSA GEORGIANA. THURSTON, 1974A:103.

DISTRIBUTION: MAGELLANIC AREA: USHUAIA BAY (AS).
ROSS SEA: OFF CAPE ADARE, 82-92 M (KHB), 47 M (AOW).
SOUTH GEORGIA: CUMBERLAND BAY, 1-2 M; OFF GRYTVIKEN, 5 M (AS); CUMBERLAND EAST BAY, 18-26 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 2-10 M, PAAL HARBOUR, 5-15 M (MHT).

DEPTH RANGE: 1-92 M.

+ + + + + + + + + + + + +

LAPHYSTIOPSIDAE

PROLAPHYSTIOPSIS PLATYCERAS SCHELLENBERG

PROLAPHYSTIOPSIS PLATYCERAS SCHELLENBERG, 1931:115, FIG. 62.
PROLAPHYSTIOPSIS PLATYCERAS. J.L.BARNARD, 1958B:86.

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).

PROLAPHYSTIUS ISOPODOPS K.H.BARNARD

PROLAPHYSTIUS ISOPODOPS K.H.BARNARD, 1930:342, FIGS. 17-19.
PROLAPHYSTIUS ISOPODOPS. J.L.BARNARD, 1958B:85.

DISTRIBUTION: ROSS SEA: MCMURDO SOUND, 406-441 M (KHB).

+ + + + + + + + + + + + +

LEUCOTHOIDAE

LEUCOTHOE SPINICARPA (ABILDGAARD)

GAMMARUS SPINICARPUS ABILDGAARD, 1789:66, PL. 119, FIGS. 1-4.
CANCER (GAMMARUS) ARTICULOSUS. MONTAGU, 1804:70, PL. 6, FIG. 6.
ASTACUS ARTICULOSUS. PENNANT, 1812:36.
LEUCOTHOE ARTICULOSA. LEACH, 1814A:403.
LEUCOTHOE ARTICULOSUS. LAMARCK, 1818:181.
LEUCOTHOE ARTICULOSA. DESMAREST, 1825:263, PL. 45, FIG. 5.
LEUCOTHOE ARTICULATA. AUDOUIN, 1826:92.
LEUCOTHOE ARTICULOSA. MILNE EDWARDS, 1830:381.
LEUCOTHOE ARTICULOSA. MILNE EDWARDS, 1840:58, PL. 29, FIG. 14.
LEUCOTHOE ARTICULOSA. WHITE, 1847.
LEUCOTHOE ARTICULOSA. WHITE, 1850:53.
LEUCOTHOE ARTICULOSA. GOSSE, 1855:141, FIG. 259.
LEUCOTHOE ARTICULOSA. BATE, 1856:59.
LEUCOTHOE ARTICULOSA. LILJEBORG, 1856:126.
LEUCOTHOE ARTICULOSA. BATE, 1857:146.
LEUCOTHOE ARTICULOSA. WHITE, 1857:188.
LEUCOTHOE DENTICULATA. GRUBE, 1861:125.
LEUCOTHOE ARTICULOSA. BATE, 1862:156, PL. 29, FIG. 2.
LEUCOTHOE ARTICULOSA. BATE AND WESTWOOD, 1863,1868:271, FIG.
LEUCOTHOE ARTICULOSA. GRUBE, 1864.
LEUCOTHOE SPINICARPA VAR. MIERS, 1884:312.
LEUCOTHOE SPINICARPA. HASWELL, 1885:101.
LEUCOTHOE DENTICULATA. HELLER, 1866:33.
LEUCOTHOE ANTARCTICA PFEFFER, 1888:128, PL. 2, FIG. 4.
LEUCOTHOE MIERSI STEBBING, 1888:772, PL. 46.
LEUCOTHOE FLINDERSI STEBBING, 1888:779, PL. 48.
LEUCOTHOE SPINICARPA. NORMAN, 1889:113.
LEUCOTHOE SPINICARPA. CHEVREUX AND BOUVIER, 1893:127.
LEUCOTHOE SPINICARPA. DELLA VALLE, 1893:652, (IN PART).
LEUCOTHOE SPINICARPA. SARS, 1895:283, PLS. 100,101, FIG. 1, (AS LEUCOTHOE ARTICULOSA ON PLATES).
LEUCOTHOE SPINICARPA. WALKER, 1895A:302.
LEUCOTHOE SPINICARPA. CHEVREUX, 1898:478.
LEUCOTHOE SPINICARPA. WALKER, 1898:167.
LEUCOTHOE SPINICARPA. CHEVREUX, 1900:57.
LEUCOTHOE SPINICARPA. WALKER, 1901:302.
LEUCOTHOE SPINICARPA. WALKER, 1904:258.
LEUCOTHOE SPINICARPA. WALKER, 1905:925.
LEUCOTHOE SPINICARPA. STEBBING, 1906:165.
LEUCOTHOE MIERSI. STEBBING, 1906:165.
LEUCOTHOE BREVIDIGITATA. STEBBING, 1906:167.
LEUCOTHOE ANTARCTICA. STEBBING, 1906:168.
LEUCOTHOE ARTICULOSA. SINEL, 1907:221.
LEUCOTHOE SPINICARPA. WALKER, 1907:18.
LEUCOTHOE SPINICARPA. WALKER, 1909:331.
LEUCOTHOE SPINICARPA. KUNKEL, 1910:12, FIG. 3.
LEUCOTHOE SPINICARPA. STEBBING, 1910A:580.
LEUCOTHOE MIERSI. STEBBING, 1910B:453.
LEUCOTHOE SPINICARPA. CHEVREUX, 1911A:194.
LEUCOTHOE SPINICARPA. CHILTON, 1912:478.
LEUCOTHOE SPINICARPA. PEARSE, 1912:370.
LEUCOTHOE SPINICARPA. CHEVREUX, 1913:108.
LEUCOTHOE SPINICARPA. CHILTON, 1913:60.
LEUCOTHOE SPINICARPA. K.H.BARNARD, 1916:148.
LEUCOTHOE SPINICARPA. CHILTON, 1921B:59.
LEUCOTHOE SPINICARPA. SHOEMAKER, 1921:99.
LEUCOTHOE SPINICARPA. CHEVREUX AND FAGE, 1925:122, FIGS. 118,119, (KEY).
LEUCOTHOE SPINICARPA. STEPHENSEN, 1925:177.
LEUCOTHOE SPINICARPA. MONOD, 1926:53, FIG. 51.
LEUCOTHOE SPINICARPA. SCHELLENBERG, 1926A:308.
LEUCOTHOE SPINICARPA. SCHELLENBERG, 1926B:195.
LEUCOTHOE SPINICARPA. GRAVELY, 1927:1.
LEUCOTHOE SPINICARPA. HALE, 1929:210, FIGS. 207,208.
LEUCOTHOE SPINICARPA. K.H.BARNARD, 1930:338,449.
LEUCOTHOE SPINICARPA. K.H.BARNARD, 1931B:119.
LEUCOTHOE SPINICARPA. SCHELLENBERG, 1931:92.
LEUCOTHOE SPINICARPA. K.H.BARNARD, 1932:106.
LEUCOTHOE SPINICARPA. SHOEMAKER, 1933:8.

LEUCOTHOE SPINICARPA. PIRLOT, 1936:293.
LEUCOTHOE SPINICARPA. K.H.BARNARD, 1937:152.
LEUCOTHOE SPINICARPA. NICHOLLS, 1938:47.
LEUCOTHOE SPINICARPA. RUFFO, 1938:131.
LEUCOTHOE SPINICARPA. PIRLOT, 1939:52,74.
LEUCOTHOE SPINICARPA. K.H.BARNARD, 1940:516.
LEUCOTHOE SPINICARPA. STEPHENSEN, 1947:45.
LEUCOTHOE SPINICARPA. GURJANOVA, 1951:486, FIG. 319.
LEUCOTHOE SPINICARPA. REID, 1951:225,278,286.
LEUCOTHOE SPINICARPA. RUDWICK, 1951:151, FIG. 2.
LEUCOTHOE SPINICARPA. J.L.BARNARD, 1958B:86.
LEUCOTHOE SPINICARPA. NAYAR, 1959:16, PL. 5, FIGS. 1-6.
LEUCOTHOE SPINICARPA. J.L.BARNARD, 1962C:132, FIG. 7.
LEUCOTHOE SPINICARPA. J.L.BARNARD, 1964D:227.
LEUCOTHOE SPINICARPA. J.L.BARNARD, 1966B:22.
LEUCOTHOE SPINICARPA. SIVAPRAKASAM, 1966:93.
LEUCOTHOE SPINICARPA. SIVAPRAKASAM, 1967:384, FIG. 1.
LEUCOTHOE SPINICARPA. RUFFO, 1969:11.
LEUCOTHOE SPINICARPA. DAY, ET. AL., 1970:51.
LEUCOTHOE SPINICARPA. KARAMAN, 1971A:66, (WITH CASPIAN SEA REFERENCES).
LEUCOTHOE SPINICARPA. BELLAN-SANTINI, 1972A:193.
LEUCOTHOE SPINICARPA. BOUSFIELD, 1973:93, PL. 18.
LEUCOTHOE SPINICARPA. GRIFFITHS, 1973:292.
LEUCOTHOE SPINICARPA. SANDERSON, 1973:34.
LEUCOTHOE SPINICARPA. J.L.BARNARD, 1974A:79.
LEUCOTHOE SPINICARPA. BELLAN-SANTINI AND LEDOYER, 1974:677.
LEUCOTHOE SPINICARPA. GRIFFITHS, 1974A:197.
LEUCOTHOE SPINICARPA. GRIFFITHS, 1974B:246.
LEUCOTHOE SPINICARPA. GRIFFITHS, 1974C:303.
LEUCOTHOE SPINICARPA. SURYA RAO, 1974:199.
LEUCOTHOE SPINICARPA. THURSTON, 1974A:24.
NOT LEUCOTHOE SPINICARPA. CHILTON, 1923B:88, (=LEUCOTHOE TRAILLI).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-972 M (GEN); GEOLOGIE ARCHIPELAGO, 50-96 M; CAPE GEODESIE, 220-240 M (DBS).
BELLINGSHAUSEN SEA: 71 19 S 87 37 W, 400 M (TM).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
FALKLAND ISLANDS: PORT ALBEMARLE, 15 M; BERKELEY SOUND, 16 M; 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 137-150 M (AS); EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).
KERGUELEN ISLANDS: OBSERVATORY BAY (AS); MORBIHAN BAY, CHAT ISLAND; PORT AUX FRANCAIS, 2 M (BS&L).
MAGELLANIC AREA: CAPE VALENTINA, 270 M; RIO SECO, 18-36 M; SMYTH CHANNEL, 14 M; PUNTA ARENAS, 23 M; BEAGLE CHANNEL, 125 M; LENNOX ISLAND, 18 M (AS).
MARGUERITE BAY: 200 M (EC).
PALMER ARCHIPELAGO: NEUMAYER CHANNEL; PORT LOCKROY, 60-70 M (EC); BISMARCK STRAIT, 90-130 M (KHB).
ROSS SEA: MCMURDO SOUND, 457 M; CAPE ROYDS, 55-146 M (KHB); WINTER QUARTERS BAY (AOW).
SOUTHERN OCEAN: ATLANTIC SECTOR, 53 34 S 43 23 W, 160 M (AS).
SOUTH GEORGIA: (GP); CUMBERLAND BAY, 250-310 M (AS), 120-204 M (KHB); OFF GRYTVIKEN, 25-50 M (AS); CUMBERLAND EAST BAY, 60-235 M; 53 55 S 38 01 W, 107 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, BORGE BAY, 1-20 M; PAAL HARBOUR, 5-49 M (MHT).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 10-15 M (KS).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, LEMAIRE CHANNEL, 40-60 M (EC).

DEPTH RANGE: 1-972 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

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LILJEBORGIIDAE

LILJEBORGIA CHEVREUXI SCHELLENBERG

LILLJEBORGIA CHEVREUXI SCHELLENBERG, 1931:128.
LILLJEBORGIA CONSANGUINEA. CHEVREUX, 1913:125, FIGS. 25-27.

DISTRIBUTION: MARGUERITE BAY: 200 M (EC).

LILJEBORGIA CONSANGUINEA STEBBING

LILJEBORGIA CONSANGUINEA STEBBING, 1888:980, PL. 91.
NICIPPE PALLIDA. DELLA VALLE, 1893:658, (IN PART).
LILJEBORGIA CONSANGUINEA. STEBBING, 1906:232.
LILJEBORGIA CONSANGUINEA. STRAUSS, 1909:43, PL. 5, FIG. 29.
LILJEBORGIA CONSANGUINEA. STEBBING, 1910B:454.
LILJEBORGIA CONSANGUINEA. SCHELLENBERG, 1926B:195.
LILJEBORGIA CONSANGUINEA. NICHOLLS, 1938:85, FIG. 45.
LILJEBORGIA CONSANGUINEA. K.H.BARNARD, 1940:516.
LILJEBORGIA CONSANGUINEA. J.L.BARNARD, 1958B:87.
LILJEBORGIA CONSANGUINEA. J.L.BARNARD, 1962B:86, TABLE 1.
LILJEBORGIA CONSANGUINEA. GRIFFITHS, 1974C:303.
NOT LILLJEBORGIA CONSANGUINEA. CHEVREUX, 1913:125, FIGS. 25-27, (=LILJEBORGIA CHEVREUXI).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-90 M (GEN).
HEARD ISLAND: 135 M (TRRS).
KERGUELEN ISLANDS: ACCESSIBLE BAY, 36 M (TRRS).

DEPTH RANGE: 36-135 M.

EXTRINSIC DISTRIBUTION: SOUTH AFRICA.

LILJEBORGIA DUBIA (HASWELL)

EUSIRUS DUBIUS HASWELL, 1880B:331, PL. 20, FIG. 3.
EUSIRUS DUBIUS. HASWELL, 1882:247.
EUSIRUS DUBIUS. HASWELL, 1885:100, PL. 14, FIG. 1.
EUSIRUS AFFINIS HASWELL, 1885:101, PL. 14, FIGS. 2-4.
LILJEBORGIA HASWELLI STEBBING, 1888:985, PL. 92.
NICIPPE HASWELLI. DELLA VALLE, 1893:661, PL. 59, FIG. 68.
LILJEBORGIA HASWELLI. THOMSON, 1902:463.
? LILJEBORGIA HASWELLI. WALKER, 1903A:60, (QUESTIONED BY J .L.BARNARD, 1972C).
LILJEBORGIA HASWELLI. HUTTON, 1904:259.
LILJEBORGIA DUBIA. STEBBING, 1906:233.
LILLJEBORGIA DUBIA. WALKER, 1907:35.
LILJEBORGIA DUBIA. STEBBING, 1908:78.
LILJEBORGIA DUBIA. CHILTON, 1909A:619.
LILJEBORGIA DUBIA. STRAUSS, 1909:43, PL. 4, FIG. 28.
LILJEBORGIA DUBIA. STEBBING, 1910A:638.
LILJEBORGIA DUBIA. THOMSON, 1913:243.
LILJEBORGIA DUBIA. CHILTON, 1921B:65.
LILJEBORGIA DUBIA. K.H.BARNARD, 1930:365, FIG. 35.
? LILJEBORGIA DUBIA. PIRLOT, 1936:300, FIG. 125, (QUESTIONED BY J.L.BARNARD, 1972C).
LILJEBORGIA DUBIA. HURLEY, 1954D:785,796, (KEY).
LILJEBORGIA DUBIA. J.L.BARNARD, 1958B:87.
LILJEBORGIA DUBIA. J.L.BARNARD, 1962B:86, TABLE 1.
LILJEBORGIA DUBIA. DAY, ET. AL., 1970:52.
LILJEBORGIA DUBIA. J.L.BARNARD, 1972C:29,138, (KEY).
LILJEBORGIA DUBIA. GRIFFITHS, 1974C:303.
NOT LILJEBORGIA DUBIA. STEBBING, 1910B:454, (=LILJEBORGIA GEORGIANA).
NOT LILJEBORGIA DUBIA. CHILTON, 1912:485, (=LILJEBORGIA GEORGIANA).

DISTRIBUTION: ROSS SEA: WINTER QUARTERS BAY; CAPE ADARE, 47 M (AOW).

EXTRINSIC DISTRIBUTION: AUSTRALIA; NEW ZEALAND; SNARES ISLANDS; SOUTH AFRICA.

LILJEBORGIA EURYCRADUS THURSTON

LILJEBORGIA EURYCRADUS THURSTON, 1974B:47, FIGS. 15,16.

DISTRIBUTION: SOUTH GEORGIA: (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 9-13 M (MHT).

LILJEBORGIA GEORGIANA SCHELLENBERG

LILLJEBORGIA GEORGIANA SCHELLENBERG, 1931:135, FIG. 72.
LILJEBORGIA DUBIA. STEBBING, 1910B:454.
LILJEBORGIA DUBIA. CHILTON, 1912:485.
LILJEBORGIA GEORGIANA. NICHOLLS, 1938:86, FIG. 46.
LILJEBORGIA GEORGIANA. J.L.BARNARD, 1958B:88.
LILJEBORGIA GEORGIANA. J.L.BARNARD, 1962B:86, TABLE 1.
LILJEBORGIA CF. GEORGIANA. BELLAN-SANTINI, 1972A:193, PL. 15.
LILJEBORGIA CF. GEORGIANA. BELLAN-SANTINI, 1972B:689.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 7-45 M (GEN); GEOLOGIE ARCHIPELAGO, 15-130 M; CAPE JULES, 66 44 S 140 55 E, 15-20 M (DBS).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC).

DEPTH RANGE: 7-130 M.

LILJEBORGIA KERGUELENENSIS BELLAN-SANTINI AND LEDOYER

LILJEBORGIA KERGUELENENSIS BELLAN-SANTINI AND LEDOYER, 1974:678, PL. 21.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, 15 M, PORT JEANNE-D'ARC, 14-17 M, AUSTRALIA ISLAND, 24 M (BS&L).

DEPTH RANGE: 14-24 M.

LILJEBORGIA KINAHANI (BATE)

PHAEDRA KINAHANI BATE, 1862:119, PL. 21, FIG. 1.
PHAEDRA KINAHANI. BATE AND WESTWOOD, 1863,1868:211, FIG.
LILJEBORGIA KINAHANI. BOECK, 1876:497.
LILLJEBORGIA KINAHANI. CHEVREUX, 1888:666.
LILLJEBORGIA KINAHANI. SARS, 1895:532, PL. 188, FIG. 1.
LILJEBORGIA KINAHANI. STEBBING, 1906:233.
LILLJEBORGIA KINAHANI. CHEVREUX AND FAGE, 1925:157, FIG. 157.
LILJEBORGIA KINAHANI. K.H.BARNARD, 1932:142.
LILJEBORGIA KINAHANI VAR. CAPENSIS K.H.BARNARD, 1932:142, FIG. 81A.
LILJEBORGIA KINAHANI VAR. GEORGENSIS K.H.BARNARD, 1932:142, FIG. 81B.
LILJEBORGIA KINAHANI VAR. FALKLANDICA K.H.BARNARD, 1932:142, FIGS. 81C,D.
LILJEBORGIA KINAHANI. J.L.BARNARD, 1958B:88.
LILJEBORGIA KINAHANI. J.L.BARNARD, 1962B:83.
LILJEBORGIA KINAHANI. J.L.BARNARD, 1964D:228.
LILJEBORGIA KINAHANI VAR. CAECUS. SANDERSON, 1973:35.
LILJEBORGIA KINAHANI. GRIFFITHS, 1974C:304.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, PORT WILLIAM, 15 M (KBH).
SOUTH GEORGIA: STROMNESS HARBOUR, 26-35 M (KHB).

DEPTH RANGE: 15-35 M.

EXTRINSIC DISTRIBUTION: BRITAIN; FRANCE; NORWAY; SOUTH AFRICA; SOUTHERN CALIFORNIA.

LILJEBORGIA LONGICORNIS (SCHELLENBERG)

LILLJEBORGIELLA LONGICORNIS SCHELLENBERG, 1931:137, FIG. 73.
LILJEBORGIA LONGICORNIS. K.H.BARNARD, 1932:143, FIG. 82.
LILJEBORGIA LONGICORNIS. J.L.BARNARD, 1958B:88.
LILJEBORGIA LONGICORNIS. J.L.BARNARD, 1962B:86, TABLE 1.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).
SHAG ROCKS: 53 43 S 40 57 W, 177 M (KHB).
SOUTHERN OCEAN: ATLANTIC SECTOR, 49 35 S 64 43 W, 112 M (AS).
SOUTH GEORGIA: CUMBERLAND WEST BAY, 110 M; STROMNESS HARBOUR, 155-178 M; 53 52 S 36 08 W, 160 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 105-391 M.

EXTRINSIC DISTRIBUTION: ARGENTINA.

LILJEBORGIA MACRODON SCHELLENBERG

LILLJEBORGIA MACRODON SCHELLENBERG, 1931:133, FIG. 71.
LILJEBORGIA MACRODON. J.L.BARNARD, 1958B:88.
LILJEBORGIA MACRODON. J.L.BARNARD, 1962B:86, TABLE 1.

DISTRIBUTION: MAGELLANIC AREA: PUERTO HOPE, 11-18 M; USHUAIA BAY, 22-27 M; BAHIA INUTIL, 36-54 M (AS).

DEPTH RANGE: 11-54 M.

LILJEBORGIA OCTODENTATA SCHELLENBERG

LILLJEBORGIA OCTODENTATA SCHELLENBERG, 1931:129, FIG. 68.
LILJEBORGIA OCTODENTATA. J.L.BARNARD, 1958B:88.
LILJEBORGIA OCTODENTATA. J.L.BARNARD, 1962B:86, TABLE 1.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 15 M; BERKELEY SOUND, 25-30 M; PORT STANLEY, 10 M; SPARROW COVE, 11-13 M (AS).
MAGELLANIC AREA: RIO SECO, 18-36 M; PUNTA ARENAS, 14-27 M; SMYTH CHANNEL, 14 M; DUNGENESS POINT, 18 M; ELIZABETH ISLAND, 11 M; PUERTO CONDOR, 90 M; BAHIA INUTIL, 90 M; PORVENIR, 11-18 M; 'MARTHA BANK', 180 M; USHUAIA BAY, 18 M; BRIDGES ISLANDS, 13 M; 55 10 S 66 15 W, 100 M (AS).

DEPTH RANGE: 10-180 M.

LILJEBORGIA QUADRIDENTATA SCHELLENBERG

LILLJEBORGIA QUADRIDENTATA SCHELLENBERG, 1931:130, FIG. 69.
LILJEBORGIA QUADRIDENTATA. J.L.BARNARD, 1958B:88.
LILJEBORGIA QUADRIDENTATA. J.L.BARNARD, 1962B:86, TABLE 1.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M; MORAINE FJORD, 64-125 M; OFF GRYTVIKEN, 95 M (AS).

DEPTH RANGE: 64-310 M.

LILJEBORGIA QUINQUEDENTATA SCHELLENBERG

LILLJEBORGIA QUINQUEDENTATA SCHELLENBERG, 1931:132, FIG. 70.
LILJEBORGIA QUINQUEDENTATA. J.L.BARNARD, 1958B:88.
LILJEBORGIA QUINQUEDENTATA. J.L.BARNARD, 1962B:86, TABLE 1.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, 2-8 M (AS).

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LYSIANASSIDAE

ACONTIOSTOMA ACUTIBASALIS BELLAN-SANTINI AND LEDOYER

ACONTIOSTOMA ACUTIBASALIS BELLAN-SANTINI AND LEDOYER, 1974:678, PL. 22.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, CHAT ISLAND, BOSSIERE FJORD, 10-15 M, PORT JEANNE-D'ARC, 14-17 M (BS&L).

DEPTH RANGE: 10-17 M.

ACONTIOSTOMA MARIONIS STEBBING

ACONTIOSTOMA MARIONIS STEBBING, 1888:709, PL. 30.
ACONTIOSTOMA MAGELLANICUM STEBBING, 1888:714, PL. 31.
ACONTIOSTOMA MARIONIS. DELLA VALLE, 1893:786.
ACONTIOSTOMA MARIONIS. STEBBING, 1906:15, FIG. 4.
ACONTIOSTOMA MAGELLANICUM. STEBBING, 1906:15.
ACONTIOSTOMA MARIONIS. CHILTON, 1912:462.
ACONTIOSTOMA MARIONIS. STEBBING, 1914:356.
ACONTIOSTOMA MARIONIS. SCHELLENBERG, 1931:5.
ACONTIOSTOMA MARIONIS. K.H.BARNARD, 1932:32.
ACONTIOSTOMA MARIONIS. NICHOLLS, 1938:10, FIG. 1.
ACONTIOSTOMA MARIONIS. J.L.BARNARD, 1958B:88.
ACONTIOSTOMA MARIONIS. K.H.BARNARD, 1965:206.
ACONTIOSTOMA MARIONIS. J.L.BARNARD, 1972C:138.
ACONTIOSTOMA MARIONIS. BELLAN-SANTINI AND LEDOYER, 1974:678.

DISTRIBUTION: FALKLAND ISLANDS: RAPID POINT, LOW TIDE (TRRS); BERKELEY SOUND, 16 M (AS); PORT STANLEY, 10-16 M (KHB).
KERGUELEN ISLANDS; 5-10 M (AS); MORBIHAN BAY, BOSSIERE FJORD, 10-15 M, PORT JEANNE-D'ARC, 14-17 M, LABOUREUR SOUND, 10-35 M (BS&L).
MACQUARIE ISLAND: GARDEN BAY, ROCKS BELOW LOW TIDE; NORTH END, ROCKS (GEN).
MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS); 'LAGOTOWIA', 18 M (AS).
PRINCE EDWARD ISLANDS: MARION ISLAND, 90-135 M (TRRS).

DEPTH RANGE: LOW TIDE-135 M.

EXTRINSIC DISTRIBUTION: GOUGH ISLAND.

ADELIELLA LATICORNIS NICHOLLS

ADELIELLA LATICORNIS NICHOLLS, 1938:12, FIG. 2.
ADELIELLA LATICORNIS. J.L.BARNARD, 1958B:88.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 414 M (GEN).
DAVIS SEA: 432 M (GEN).

DEPTH RANGE: 414-432 M.

AMARYLLIS MACROPHTHALMA HASWELL

AMARYLLIS MACROPHTHALMUS HASWELL, 1880A:253, PL. 8, FIG. 3.
AMARYLLIS BREVICORNIS HASWELL, 1880A:254.
AMARYLLIS MACROPHTHALMUS. HASWELL, 1882:227.
AMARYLLIS BREVICORNIS. HASWELL, 1882:228.
GLYCERINA AFFINIS CHILTON, 1884B:1036, PL. 47, FIGS. 1A,B.
? AMARYLLIS MACROPHTHALMUS. STEBBING, 1888:706, PL. 29, (QUESTIONED BY J.L.BARNARD, 1972A).
AMARYLLIS MACROPHTHALMUS. DELLA VALLE, 1893:781, (IN PART).
AMARYLLIS MACROPHTHALMUS. THOMSON, 1902:463.
AMARYLLIS MACROPHTHALMUS. HUTTON, 1904:258.
AMARYLLIS MACROPTHALMUS. CHILTON, 1906A:267.
AMARYLLIS MACROPHTHALMA. STEBBING, 1906:24.
AMARYLLIS MACROPHTHALMUS. STEBBING, 1908:67.
? AMARYLLIS MACROPHTHALMA. WALKER, 1909:327, (QUESTIONED BY K.H.BARNARD, 1932).
AMARYLLIS MACROPHTHALMA. STEBBING, 1910A:569,633.
AMARYLLIS MACROPHTHALMUS. STEBBING, 1910B:448.
AMARYLLIS MACROPHTHALMA. CHILTON, 1912:463.
AMARYLLIS MACROPHTHALMA. K.H.BARNARD, 1916:114.
AMARYLLIS MACROPHTHALMA. CHILTON, 1921B:55.
AMARYLLIS MACROPHTHALMA. SCHELLENBERG, 1926A:243.
AMARYLLIS MACROPHTHALMA. HALE, 1929:208.
AMARYLLIS MACROPHTHALMA. SCHELLENBERG, 1931:10.
AMARYLLIS MACROPHTHALMA. K.H.BARNARD, 1932:34.
AMARYLLIS MACROPHTHALMA. PIRLOT, 1933:122, (KEY).
AMARYLLIS MACROPHTHALMA. PIRLOT, 1939:73.
AMARYLLIS MACROPHTHALMA. K.H.BARNARD, 1940:514.
AMARYLLIS MACROPHTHALMA. J.L.BARNARD, 1958B:88.
AMARYLLIS MACROPHTHALMA. DAY, ET. AL., 1970:50.
AMARYLLIS MACROPHTHALMA. J.L.BARNARD, 1972A:262, FIGS. 156-158.
AMARYLLIS MACROPHTHALMA. GRIFFITHS, 1973:292.
AMARYLLIS MACROPHTHALMA. SANDERSON, 1973:35.
AMARYLLIS MACROPHTHALMUS. J.L.BARNARD, 1974A:140.
AMARYLLIS BREVICORNIS. J.L.BARNARD, 1974A:140.
AMARYLLIS MACROPHTHALMA. GRIFFITHS, 1974A:199.
AMARYLLIS MACROPHTHALMA. GRIFFITHS, 1974B:247.
AMARYLLIS MACROPHTHALMA. GRIFFITHS, 1974C:308.
NOT AMARYLLIS MACROPHTHALMA. K.H.BARNARD, 1937:141, (=VIJAYA TENUIPES, SEE J.L.BARNARD, 1964C:63).

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M; PORT WILLIAM, 17 M; PORT STANLEY; 53 45 S 61 10 W, 140-150 M (AS); EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M, CAPE PEMBROKE, 82 M, OFF LIVELY ISLAND, 79 M (KHB).
MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS); SIMON BAY; FITZROY CHANNEL; FORTESCUE BAY, 18-22 M; BORJA BAY, 18 M; RIO SECO, 18-36 M; PUNTA ARENAS, 23-36 M; CAPE VALENTINA, 270 M; SMYTH CHANNEL; LARGA ISLAND, 14 M; PUERTO DEL HAMBRE; HARRIS BAY, 27 M; PUERTO CONDOR, 90 M; BAHIA INUTIL, 36-54 M; PORVENIR, 11-18 M; YORK BAY, 7-11 M; PUERTO EUGENIA, 18-27 M; LENNOX COVE, 18-36 M; NUEVA ISLAND, 14-54 M; USHUAIA BAY, 11-22 M; 55 10 S 66 15 W, 100 M (AS); HERMITE ISLAND, 30-35 M (KHB).

DEPTH RANGE: 7-270 M.

EXTRINSIC DISTRIBUTION: AUSTRALIA; GULF OF ADEN; NEW ZEALAND; RED SEA; SOUTHERN AFRICA.

AMBASIOPSIS GEORGIENSIS K.H.BARNARD

AMBASIOPSIS GEORGIENSIS K.H.BARNARD, 1931A:425.
AMBASIOPSIS GEORGIENSIS. K.H.BARNARD, 1932:44, FIG. 9.
AMBASIOPSIS GEORGIENSIS. J.L.BARNARD, 1958B:89.

DISTRIBUTION: SOUTH GEORGIA: 53 52 S 36 08 W, 160 M (KHB).

AMBASIOPSIS UNCINATA K.H.BARNARD

AMBASIOPSIS UNCINATA K.H.BARNARD, 1932:46, FIG. 10.
AMBASIOPSIS UNCINATA. J.L.BARNARD, 1958B:89.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

'ANONYX' CICADOIDES STEBBING

ANONYX CICADOIDES STEBBING, 1888:612, PLS. 4,5.
ANONYX CICADOIDES. DELLA VALLE, 1893:835.
HOPLONYX CICADOIDES. SARS, 1895:92.
TMETONYX CICADOIDES. STEBBING, 1906:75.
TMETONYX CICADOIDES. SCHELLENBERG, 1926A:278, FIG. 21.
TMETONYX CICADOIDES. SCHELLENBERG, 1926B:195.
TMETONYX CICADOIDES. J.L.BARNARD, 1958B:100.
TRYPHOSA CICADOIDES. J.L.BARNARD, 1962D:30, (KEY).
'ANONYX' CICADOIDES. J.L.BARNARD, 1969A:308, (KEY).
'ANONYX' CICADOIDES. BELLAN-SANTINI AND LEDOYER, 1974:681, PL. 23.

DISTRIBUTION: KERGUELEN ISLANDS: ROYAL SOUND, 50 M; ACCESSIBLE BAY, 36 M; CUMBERLAND BAY, 229 M (TRRS); OBSERVATORY BAY (AS); PORT AUX FRANCAIS, 2 M; PORT BIZET, LOW TIDE (BS&L).

DEPTH RANGE: LOW TIDE-229 M.

ARISTIAS ANTARCTICUS WALKER

ARISTIAS ANTARCTICUS WALKER, 1906A:454.
ARISTIAS ANTARCTICUS. WALKER, 1907:11, PL. 3, FIG. 5.
ARISTIAS ANTARCTICUS. SCHELLENBERG, 1926A:255, FIG. 10.
ARISTIAS ANTARCTICUS. K.H.BARNARD, 1930:324,448.
ARISTIAS ANTARCTICUS. SCHELLENBERG, 1931:23.
ARISTIAS ANTARCTICUS. K.H.BARNARD, 1932:43, FIGS. 8A,B.
ARISTIAS ANTARCTICUS. NICHOLLS, 1938:19, FIG. 6.
ARISTIAS ANTARCTICUS. J.L.BARNARD, 1958B:89.
ARISTIAS ANTARCTICUS. HURLEY, 1963:43, (KEY).
ARISTIAS ANTARCTICUS. SANDERSON, 1973:35.
ARISTIAS ANTARCTICUS. BELLAN-SANTINI AND LEDOYER, 1974:681, PL. 24.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-194 M (GEN).
DAVIS SEA: 432 M (GEN).
FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 140-150 M (AS).
KERGUELEN ISLANDS: OBSERVATORY BAY (AS); MORBIHAN BAY, AUSTRALIA ISLAND, 24 M (BS&L).
MAGELLANIC AREA: CAPE VALENTINA, 270 M; BEAGLE CHANNEL, 54 53 S 67 56 W, 140 M, 54 54 S 67 52 W, 125 M (AS).
ROSS SEA: WINTER QUARTERS BAY, 36 M (AOW); CAPE ADARE, 82-92 M; MCMURDO SOUND, 13-457 M (KHB).
SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M (AS), 120-204 M (KHB); OFF 'JASON LIGHT', 238-270 M; CUMBERLAND EAST BAY, 60-234 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 13-457 M.

ARISTIAS COLLINUS K.H.BARNARD

ARISTIAS COLLINUS K.H.BARNARD, 1932:44, FIGS. 8C,D.
ARISTIAS COLLINUS. J.L.BARNARD, 1958B:90.
ARISTIAS COLLINUS. HURLEY, 1963:43, (KEY).

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 200-342 M.

CHEIRIMEDON CRENATIPALMATUS STEBBING

CHEIRIMEDON CRENATIPALMATUS STEBBING, 1888:638, PL. 12.
CHEIRIMEDON CRENATIPALMATUS. DELLA VALLE, 1893:837.
CHEIRIMEDON HANSONI WALKER, 1903A:42, PL. 7, FIGS. 7-12.

CHEIRIMEDON CRENATIPALMATUS. STEBBING, 1906:67.
CHEIRIMEDON HANSONI. WALKER, 1907:9.
CHEIRIMEDON CRENATIPALMATUS. SCHELLENBERG, 1926A:264, FIG. 14.
CHEIRIMEDON CRENATIPALMATUS. J.L.BARNARD, 1958B:90.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS).
ROSS SEA: CAPE ADARE, 13-36 M (AOW).

DEPTH RANGE: 13-385 M.

CHEIRIMEDON FEMORATUS (PFEFFER)

ANONYX FEMORATUS PFEFFER, 1888:93, PL. 2, FIG. 2.
CHEIRIMEDON DENTIMANUS CHEVREUX, 1905D:159, FIG. 1.
CHEIRIMEDON DENTIMANUS. CHEVREUX, 1906E:2, FIGS. 1-4.
ANONYX FEMORATUS. STEBBING, 1906:86.
CHEIRIMEDON DENTIMANUS. STEBBING, 1906:720.
CHEIRIMEDON FEMORATUS. CHILTON, 1912:467.
CHEIRIMEDON DENTIMANUS. CHEVREUX, 1913:92.
CHEIRIMEDON FEMORATUS. CHILTON, 1913:57.
CHEIRIMEDON FEMORATUS. SCHELLENBERG, 1931:30.
CHEIRIMEDON FEMORATUS. K.H.BARNARD, 1932:48,315.
CHEIRIMEDON FEMORATUS. NICHOLLS, 1938:23, FIG. 8.
CHEIRIMEDON FEMORATUS. STEPHENSEN, 1938:236.
CHEIRIMEDON FEMORATUS. STEPHENSEN, 1947:34.
CHEIRIMEDON FEMORATUS. J.L.BARNARD, 1958B:90.
CHEIRIMEDON FEMORATUS. J.L.BARNARD, 1969A:314.
CHEIRIMEDON FEMORATUS. BELLAN-SANTINI, 1972A:193.
CHEIRIMEDON FEMORATUS. BELLAN-SANTINI, 1972B:689, PLS. 4,5.
CHEIRIMEDON FEMORATUS. BREGAZZI, 1972A:5-14, FIGS. 2,8.
CHEIRIMEDON FEMORATUS. BREGAZZI, 1972B:21-31.
CHEIRIMEDON FEMORATUS. BREGAZZI, 1973A:69.
CHEIRIMEDON FEMORATUS. BREGAZZI, 1973B:18.
CHEIRIMEDON FEMORATUS. BELLAN-SANTINI AND LEDOYER, 1974:681.
CHEIRIMEDON FEMORATUS. THURSTON, 1974A:14, FIGS. 6A-C.
CHEIRIMEDON FEMORATUS. THURSTON, 1974B:50.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 5-45 M (GEN); GEOLOGIE ARCHIPELAGO, 15-20 M; CAPE JULES, 66 44 S 140 55 E, 15-20 M (DBS).
CROZET ISLANDS: POSSESSION ISLAND, NAVIRE BAY (BS&L).
MARGUERITE BAY: DION ISLANDS, 9 M (MHT).
PALMER ARCHIPELGAO: WIENCKE ISLAND, 20-40 M (EC); SCHOLLAERT CHANNEL, MELCHIOR ISLANDS, 4-10 M; BISMARCK STRAIT, 90-130 M (KHB); PORT LOCKROY, 50 M (KS), LOW TIDE-27 M, GOUDIER ISLAND, LOW TIDE, PELTIER CHANNEL, 18 M (MHT).
PETER I ISLAND: (KS).
SOUTH GEORGIA: (GP); OFF GRYTVIKEN, 12-15 M; CUMBERLAND BAY, 75-310 M (AS), 18-27 M (KHB); STROMNESS HARBOUR, 26-35 M; CUMBERLAND EAST BAY, 38 M (KHB); GODTHUL BAY, 55 M; 'HYSTADHULLET', 40 M; 'CORAL BAY', 14 M (KS).
SOUTH ORKNEY ISLANDS: BROWNS BAY; SCOTIA BAY, 7-18 M (CC); SIGNY ISLAND, DOVE CHANNEL, 24-36 M (KHB), BORGE BAY, 1-12 M, PAAL HARBOUR, 5-25 M (MHT), FACTORY COVE, BORGE BAY, 5-230 M, (PKB).
SOUTH SANDWICH ISLANDS: ZAVODOVSKI ISLAND, 56 17 S 27 30 W; VISOKOI ISLAND, 55-91 M (KS).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT), 5-10 M, PORT FOSTER, 5-60 M (KHB), PENDULUM COVE, LITTORAL (EC).
TRINITY PENINSULA: SEYMOUR ISLAND (AS).
WILHELM ARCHIPELAGO: BOOTH ISLAND, 20-40 M, PORT CHARCOT, 20 M (EC).

DEPTH RANGE: LITTORAL-310 M.

CHEIRIMEDON FOUGNERI WALKER

CHEIRIMEDON FOUGNERI WALKER, 1903A:41, PL. 7, FIGS. 1-6.
CHEIRIMEDON FOUGNERI. STEBBING, 1906:720.
CHEIRIMEDON FOUGNERI. NICHOLLS, 1938:23, (IN PART, PART =CHEIRIMEDON SIMILIS).
CHEIRIMEDON FOUGNERI. SHOEMAKER, 1945A:289, (IN PART, PART =CHEIRIMEDON SIMILIS).
CHEIRIMEDON FOUGNERI. J.L.BARNARD, 1958B:90.
CHEIRIMEDON FOUGNERI. EMISON, 1968:203, FIG. 10, TABLES 10-12.
CHEIRIMEDON FOUGNERI. J.L.BARNARD, 1969A:314.
CHEIRIMEDON FOUGNERI. BELLAN-SANTINI, 1972B:689, PLS. 6,7.
CHEIRIMEDON FOUGNERI. THURSTON, 1974B:50, FIGS. 17,18,19A-E, TABLE 1.
NOT CHEIRIMEDON FOUGNERI. WALKER, 1907:9, (=CHEIRIMEDON SIMILIS).
NOT CHEIRIMEDON FOUGNERI. SCHELLENBERG, 1926A:263, FIG. 13, (=CHEIRIMEDON SIMILIS).
NOT CHERIMEDON FOUGNERI. K.H.BARNARD, 1930:326, (=CHEIRIMEDON SIMILIS).

DISTRIBUTION: ADELIE COAST: (DBS); COMMONWEALTH BAY (GEN).
PALMER ARCHIPELAGO: 'EAST BASE' (CRS).
QUEEN MARY COAST: SHACKLETON GLACIER, 66 18 S 54 58 E, (GEN).
ROSS SEA: 78 35 S, SURFACE (AOW); BAY OF WHALES (CRS); CAPE CROZIER (WBE).

CHEIRIMEDON SIMILIS THURSTON

CHEIRIMEDON SIMILIS THURSTON, 1974B:54, FIGS. 19F-I,20,21, TABLE 1.
CHEIRIMEDON FOUGNERI. WALKER, 1907:9.
CHEIRIMEDON FOUGNERI. SCHELLENBERG, 1926A:263, FIG. 13.
CHEIRIMEDON FOUGNERI. K.H.BARNARD, 1930:326.
? CHEIRIMEDON FOUGNERI. NICHOLLS, 1938:23, (IN PART, QUESTIONED BY THURSTON, 1974B).
CHEIRIMEDON FOUGNERI. SHOEMAKER, 1945A:289, (IN PART).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: STONINGTON ISLAND, SURFACE (MHT).
ROSS SEA: MCMURDO SOUND, 92 M (KHB); WINTER QUARTERS BAY, 7 M, HUT POINT (AOW).

DEPTH RANGE: SURFACE-385 M.

CHEVREUXIELLA OBENSIS BIRSTEIN AND VINOGRADOV

CHEVREUXIELLA OBENSIS BIRSTEIN AND VINOGRADOV, 1962A:42, FIGS. 6,7.

DISTRIBUTION: DRAKE PASSAGE: 58 11 S 61 00 W, 0-1000 M (B&V).

CYPHOCARIS ANONYX BOECK

CYPHOCARIS ANONYX BOECK, 1871:104.
CYPHOCARIS ANONYX. BOECK, 1876:141, PL. 6, FIG. 1.
CYPHOCARIS ANONYX. HANSEN, 1887:67.
CYPHOCARIS MICRONYX STEBBING, 1888:656, PL. 16.
CYPHOCARIS MICRONYX. CHEVREUX, 1900:165, PL. 14, FIG. 11.
CYPHOCARIS ANONYX. WALKER, 1903B:232, PL. 18, FIG. 14.
CYPHOCARIS ANONYX. STEBBING, 1904:14,47.
CYPHOCARIS ANONYX. CHEVREUX, 1905C:7.
CYPHOCARIS ANONYX. STEBBING, 1906:29.
CYPHOCARIS ANONYX. TATTERSALL, 1906:28.
CYPHOCARIS ANONYX. STRAUSS, 1909:9,69, PL. 6, FIGS. 39-42.
CYPHOCARIS ANONYX. STEPHENSEN, 1912A:87.
CYPHOCARIS ANONYX. STEPHENSEN, 1913:111.
CYPHOCARIS ANONYX. STEPHENSEN, 1915:37.
CYPHOCARIS ANONYX. CHEVREUX, 1916:2.
CYPHOCARIS ANONYX. STEPHENSEN, 1923:50.
CYPHOCARIS ANONYX. SCHELLENBERG, 1926A:244.
CYPHOCARIS ANONYX. SCHELLENBERG, 1926B:210, FIGS. 2B,5A,B, PL. 5, FIG. 2.
CYPHOCARIS ANONYX. SCHELLENBERG, 1927:662, FIG. 57.
CYPHOCARIS ANONYX. PIRLOT, 1929:5.
CYPHOCARIS ANONYX. SCHELLENBERG, 1929B:195.
CYPHOCARIS ANONYX. K.H.BARNARD, 1932:36.
CYPHOCARIS ANONYX. PIRLOT, 1933:127.
CYPHOCARIS ANONYX. STEPHENSEN, 1933:4,68.
CYPHOCARIS ANONYX. STEPHENSEN, 1935:42, FIG. 3.
CYPHOCARIS ANONYX. K.H.BARNARD, 1937:142.
CYPHOCARIS ANONYX. K.H.BARNARD, 1940:440,514.
CYPHOCARIS ANONYX. SHOEMAKER, 1945B:187, FIGS. 1A,B.
CYPHOCARIS ANONYX. GURJANOVA, 1951:176,177, FIG. 51B, (KEY).
CYPHOCARIS ANONYX. J.L.BARNARD, 1954C:53.
CYPHOCARIS ANONYX. BIRSTEIN AND VINOGRADOV, 1955:212,280,284, FIG. 1, TABLE 3.
CYPHOCARIS ANONYX. SCHELLENBERG, 1955:185,191.
CYPHOCARIS ANONYX. J.L.BARNARD, 1958B:91.
CYPHOCARIS ANONYX. BIRSTEIN AND VINOGRADOV, 1958:220,249,252, FIG. 17.
CYPHOCARIS ANONYX. BIRSTEIN AND VINOGRADOV, 1960:168,227,230.
CYPHOCARIS ANONYX. BIRSTEIN AND VINOGRADOV, 1962A:34.
CYPHOCARIS ANONYX. GURJANOVA, 1962:65,69, FIG. 9, (KEY).
CYPHOCARIS ANONYX. HURLEY, 1963:24,25, (KEY).
CYPHOCARIS ANONYX. J.L.BARNARD, 1967B:55.
CYPHOCARIS ANONYX. SANDERSON, 1973:35.
CYPHOCARIS ANONYX. SANGER, 1974:3, TABLES 2,3.
NOT CYPHOCARIS ANONYX. CHILTON, 1912:464, PL. 1, FIGS. 1-4, (=CYPHOCARIS RICHARDI).

DISTRIBUTION: SOUTHERN OCEAN: PACIFIC SECTOR, 55 18 S 109 20 W, 0-1200 M; 51 22 S 109 28 W, 0-1200 M (B&V).

DEPTH RANGE: 0-1200 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

CYPHOCARIS CHALLENGERI STEBBING

CYPHOCARIS CHALLENGERI STEBBING, 1888:661, PL. 17.
CYPHOCARIS CHALLENGERI. DELLA VALLE, 1893:847.
CYPHOCARIS ALICEI CHEVREUX, 1905B:1, FIGS. 1,2.
CYPHOCARIS ALICEI. CHEVREUX, 1905C:7.
CYPHOCARIS CHALLENGERI. STEBBING, 1906:29, FIG. 6.
CYPHOCARIS ALICEI. STEBBING, 1906:717.
CYPHOCARIS ALICEI. WALKER, 1909:327.
CYPHOCARIS ALICEI. STEPHENSEN, 1915:37.
CYPHOCARIS CHALLENGERI. CHEVREUX, 1916:2, FIG. 1.
CYPHOCARIS CHALLENGERI. SCHELLENBERG, 1926A:243.
CYPHOCARIS CHALLENGERI. SCHELLENBERG, 1926B:212, FIGS. 2D,6-10, PL. 5, FIG. 3.
CYPHOCARIS CHALLENGERI. PIRLOT, 1929:7.
CYPHOCARIS CHALLENGERI. SCHELLENBERG, 1929B:195.
CYPHOCARIS CHALLENGERI. K.H.BARNARD, 1932:36.
CYPHOCARIS CHALLENGERI. PIRLOT, 1933:128.
CYPHOCARIS CHALLENGERI. K.H.BARNARD, 1937:142.
CYPHOCARIS CHALLENGERI. K.H.BARNARD, 1940:440,514.
CYPHOCARIS CHALLENGERI. THORSTEINSON, 1941:58.
CYPHOCARIS CHALLENGERI. SHOEMAKER, 1945B:187, FIG. 1C.
CYPHOCARIS CHALLENGERI. GURJANOVA, 1951:177, (KEY).
CYPHOCARIS CHALLENGERI. BIRSTEIN AND VINOGRADOV, 1955:212,276,284, FIGS. 32,33, TABLE 3.
CYPHOCARIS CHALLENGERI. SCHELLENBERG, 1955:185,191.
CYPHOCARIS CHALLENGERI. J.L.BARNARD, 1958B:91.
CYPHOCARIS CHALLENGERI. BIRSTEIN AND VINOGRADOV, 1958:220,250,252,253.
CYPHOCARIS CHALLENGERI. BIRSTEIN AND VINOGRADOV, 1960:168,227,230.
CYPHOCARIS CHALLENGERI. J.L.BARNARD, 1961:31.
CYPHOCARIS CHALLENGERI. J.L.BARNARD, 1962D:24, TABLES 7A,10.
CYPHOCARIS CHALLENGERI. BIRSTEIN AND VINOGRADOV, 1962A:34.
CYPHOCARIS CHALLENGERI. GURJANOVA, 1962:64,65, FIG. 5, (KEY).
CYPHOCARIS CHALLENGERI. HURLEY, 1963:24, (KEY).
CYPHOCARIS CHALLENGERI. BOWMAN AND MCCAIN, 1967:1-14, FIGS. 1-9.
CYPHOCARIS CHALLENGERI. SANDERSON, 1973:35.
CYPHOCARIS CHALLENGERI. GRIFFITHS, 1974A:199.
CYPHOCARIS CHALLENGERI. SANGER, 1974:3, FIGS. 2,3, TABLES 2,3.

DISTRIBUTION: DRAKE PASSAGE: (B&V).

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

CYPHOCARIS FAUREI K.H.BARNARD

CYPHOCARIS FAUREI K.H.BARNARD, 1916:117, PL. 26, FIG. 4.
CYPHOCARIS FAUREI. SCHELLENBERG, 1926B:215, FIGS. 2E,11,12, PL. 5, FIG. 4.
CYPHOCARIS FAUREI. SCHELLENBERG, 1929B:195.
CYPHOCARIS FAUREI. K.H.BARNARD, 1932:36.
CYPHOCARIS FAUREI. PIRLOT, 1933:128.
CYPHOCARIS FAUREI. K.H.BARNARD, 1937:141.
CYPHOCARIS FAUREI. K.H.BARNARD, 1940:514.
CYPHOCARIS FAUREI. GURJANOVA, 1951:177, (KEY).
CYPHOCARIS FAUREI. J.L.BARNARD, 1958B:91.
CYPHOCARIS FAUREI. BIRSTEIN AND VINOGRADOV, 1960:169,227,230, FIG. 31.
CYPHOCARIS FAUREI. J.L.BARNARD, 1961:31.
CYPHOCARIS FAUREI. BIRSTEIN AND VINOGRADOV, 1962A:34.
CYPHOCARIS FAUREI. GURJANOVA, 1962:64,66, FIG. 6, (KEY).
CYPHOCARIS FAUREI. HURLEY, 1963:24,25, (KEY).
CYPHOCARIS FAUREI. SANDERSON, 1973:35.
CYPHOCARIS FAUREI. GRIFFITHS, 1974C:309.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR, 54 42 S 109 12 E, 0-550 M; 51 22 S 109 28 W, 0-1200 M (B&V).

DEPTH RANGE: 0-1200 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

CYPHOCARIS RICHARDI CHEVREUX

CYPHOCARIS RICHARDI CHEVREUX, 1905A:1, FIGS. 1,2.
CYPHOCARIS RICHARDI. CHEVREUX, 1905C:7.
CYPHOCARIS RICHARDI. STEBBING, 1906:717.
CYPHOCARIS RICHARDI. STRAUSS, 1909:65, PL. 6, FIG. 37.
CYPHOCARIS RICHARDI. STEBBING, 1910B:449.
CYPHOCARIS ANONYX. CHILTON, 1912:464, PL. 1, FIGS. 1-4.
CYPHOCARIS RICHARDI. STEPHENSEN, 1915:37, FIGS. 21,22.
CYPHOCARIS RICHARDI. K.H.BARNARD, 1916:116.
CYPHOCARIS RICHARDI. CHEVREUX, 1916:1.
CYPHOCARIS RICHARDI. SCHELLENBERG, 1926A:245, FIG. 4.
CYPHOCARIS RICHARDI. SCHELLENBERG, 1926B:206, FIGS. 2A,3A-C,4A-D, PL. 5, FIG. 1.
CYPHOCARIS RICHARDI. SCHELLENBERG, 1929B:195.
CYPHOCARIS RICHARDI. SCHELLENBERG, 1931:15.
CYPHOCARIS RICHARDI. K.H.BARNARD, 1932:35.
CYPHOCARIS RICHARDI. STEPHENSEN, 1933:4,68.
CYPHOCARIS RICHARDI. K.H.BARNARD, 1940:514.
CYPHOCARIS RICHARDI. SHOEMAKER, 1945B:187, FIG. 1D.
CYPHOCARIS RICHARDI. GURJANOVA, 1951:177, (KEY).
CYPHOCARIS RICHARDI. J.L.BARNARD, 1954C:53, PLS. 2,3.
CYPHOCARIS RICHARDI. BIRSTEIN AND VINOGRADOV, 1955:212,278,284, FIGS. 2,3, 33, TABLE 3.
CYPHOCARIS RICHARDI. J.L.BARNARD, 1958B:91.
CYPHOCARIS RICHARDI. BIRSTEIN AND VINOGRADOV, 1958:221.
CYPHOCARIS RICHARDI. BIRSTEIN AND VINOGRADOV, 1960:167,227,234.
CYPHOCARIS RICHARDI. J.L.BARNARD, 1961:32.
CYPHOCARIS RICHARDI. J.L.BARNARD, 1962D:24, TABLES 7A,10.
CYPHOCARIS RICHARDI. BIRSTEIN AND VINOGRADOV, 1962A:33.
CYPHOCARIS RICHARDI. GURJANOVA, 1962:65,69, FIG. 10, (KEY).
CYPHOCARIS RICHARDI. HURLEY, 1963:24,25, (KEY).
CYPHOCARIS RICHARDI. EMISON, 1968:203, FIG. 10, TABLES 10-12.

DISTRIBUTION: BOUVET ISLAND: 52 25 S 09 50 E, 1310-1410 M (KHB).
BRANSFIELD STRAIT: 62 27 S 58 11 W, 76-750 M (KHB).
DRAKE PASSAGE: 59 28 S 67 41 W, 0-1100 M; 58 11 S 61 00 W, 0-1000 M (B&V).
ROSS SEA: CAPE CROZIER (WBE).
SOUTHERN OCEAN: ATLANTIC SECTOR, 71 50 S 23 30 W, 0-1000 M (CC); 52 25 S 09 50 E, 1310-1410 M (KHB); 52 39 S 37 35 W, 0-2000 M (AS); INDIAN SECTOR, 54 42 S 109 12 E, 0-550 M; 67 29 S 30 59 E, 0-4500 M (B&V); 55 27 S 28 59 E, 0-1000 M (AS); PACIFIC SECTOR, 63 18 S 135 14 E, 0-3600 M; 61 42 S 109 16 W, 0-1100 M (B&V).

DEPTH RANGE: 0-4500 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

EURYTHENES GRYLLUS (LICHTENSTEIN)

GAMMARUS GRYLLUS LICHTENSTEIN, 1822:34.
LYSIANASSA MAGELLANICA MILNE EDWARDS, 1848:398.
LYSIANASSA MAGELLANICA. BATE, 1862:66, PL. 10, FIG. 5.
EURYTENES MAGELLANICUS. LILLJEBORG, 1865:11, PL. 1-3, FIGS. 1-22.
LYSIANASSA GRYLLUS. GOES, 1866:517, PL. 36, FIG. 1.
EURYTENE GRYLLUS. BOECK, 1870:25.
EURYTHENES GRYLLUS. SMITH, 1874:181.
EURYTENES GRYLLUS. BOECK, 1876:144.
EURYTHENES GRYLLUS. SMITH, 1884:54.
GAMMARUS GRYLLUS. STEBBING, 1888:116, (COPY OF LICHTENSTEIN, 1822:34).
EURYTHENES GRYLLUS. CHEVREUX, 1889:298.
EURYPOREIA GRYLLUS. DELLA VALLE, 1893:848, PL. 60, FIG. 58.
EURYPOREIA GRYLLUS. CHEVREUX, 1895:426.
EURYPOREIA GRYLLUS. SARS, 1895:86, PL. 30.
EURYPOREIA GRYLLUS. CHEVREUX, 1900:24, PL. 14, FIG. 4.
EURYTHENES GRYLLUS. STEBBING, 1906:73.
EURYTHENES GRYLLUS. CHILTON, 1911B:563.
EURYTENES GRYLLUS. STEPHENSEN, 1912B:528.
EURYTHENES MAGELLANICUS. K.H.BARNARD, 1932:59.
EURYTHENES GRYLLUS. STEPHENSEN, 1933:12,69, FIGS. 4,5, (IN PART, PART =EURYTHENES OBESUS, FIGS. 6,7).
EURYTHENES GRYLLUS. STEPHENSEN, 1935:91, (IN PART, PART =EURYTHENES OBESUS).
EURYTHENES GRYLLUS. K.H.BARNARD, 1940:440.
EURYTHENES GRYLLUS. SHOEMAKER, 1945B:186.
EURYTHENES GRYLLUS. STEPHENSEN, 1949:3.
EURYTHENES GRYLLUS. GURJANOVA, 1951:265, FIG. 134.
EURYTHENES GRYLLUS. BIRSTEIN AND VINOGRADOV, 1955:225,277,279,280,284, TABLE 3.
EURYTHENES GRYLLUS. SCHELLENBERG, 1955:192.
EURYTHENES GRYLLUS. SHOEMAKER, 1956:177.

EURYTHENES GRYLLUS. HURLEY, 1957B:2.
EURYTHENES GRYLLUS. J.L.BARNARD, 1958B:92.
EURYTHENES MAGELLANICUS. J.L.BARNARD, 1958B:92.
EURYTHENES GRYLLUS. BIRSTEIN AND VINOGRADOV, 1958:228,250,253.
EURYTHENES GRYLLUS. BIRSTEIN AND VINOGRADOV, 1960:183,227,234.
EURYTHENES GRYLLUS. J.L.BARNARD, 1961:35, FIGS. 5-7.
EURYTHENES GRYLLUS. GURJANOVA, 1962:340, (KEY).
EURYTHENES GRYLLUS. TEMPLEMAN, 1967:215, FIGS. 1-3.
EURYTHENES GRYLLUS. BOWMAN AND MANNING, 1972:193, FIGS. 2-5.
EURYTHENES GRYLLUS. HESSLER, ISAACS AND MILLS, 1972:636,637.
EURYTHENES GRYLLUS. PAUL, 1973:289.

DISTRIBUTION: MAGELLANIC AREA: CAPE HORN (HME).
SOUTHERN OCEAN: PACIFIC SECTOR: 61 31 S 108 00 W TO 61 22 S 108 24 W, 5024-5045 M; 63 53 S 108 39 W TO 63 52 S 109 02 W, 4930-4963 M (B&M).

DEPTH RANGE: 4930-5045 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

EURYTHENES OBESUS (CHEVREUX)

KATIUS OBESUS CHEVREUX, 1905C:1, FIGS. 1-3.
KATIUS OBESUS. STEBBING, 1906:721.
KATIUS OBESUS. TATTERSALL, 1906:29.
KATIUS OBESUS. STEPHENSEN, 1912A:89.
KATIUS OBESUS. STEPHENSEN, 1912B:614.
KATIUS OBESUS. STEPHENSEN, 1913:123.
KATIUS OBESUS. STEPHENSEN, 1915:37.
KATIUS OBESUS. SHOEMAKER, 1920:8E.
KATIUS OBESUS. STEPHENSEN, 1925:126.
KATIUS OBESUS. SCHELLENBERG, 1926B:217, FIG. 26D.
KATIUS OBESUS. SCHELLENBERG, 1927:681, FIG. 72.
KATIUS OBESUS. SCHELLENBERG, 1931:16.
KATIUS OBESUS. K.H.BARNARD, 1932:56, FIG. 21, PL. 1, FIG. 1.
EURYTHENES GRYLLUS. STEPHENSEN, 1933:12,69, FIGS. 6,7, (IN PART).
KATIUS OBESUS. CHEVREUX, 1935:63, PL. 10, FIGS. 4,6, PL. 11, FIG. 10.
EURYTHENES GRYLLUS. STEPHENSEN, 1935:91, (IN PART).
EURYTHENES OBESUS. SCHELLENBERG, 1955:183,192.
KATIUS OBESUS. SHOEMAKER, 1956:177.
EURYTHENES OBESUS. J.L.BARNARD, 1958B:92.
EURYTHENES OBESUS. BIRSTEIN AND VINOGRADOV, 1960:184,227,234.
EURYTHENES OBESUS. J.L.BARNARD, 1961:38, FIG. 8.
EURYTHENE OBESUS. BIRSTEIN AND VINOGRADOV, 1962A:36.
EURYTHENES OBESUS. HURLEY, 1963:59.
EURYTHENES OBESUS. BELLAN-SANTINI AND LEDOYER, 1974:681, PL. 25.

DISTRIBUTION: CROZET ISLANDS: POSSESSION ISLAND, NAVIRE BAY; EAST ISLAND, ADVENTURE BAY (BS&L).
SOUTHERN OCEAN: ATLANTIC SECTOR, 52 39 S 37 35 W, 0-2000 M (AS); INDIAN SECTOR, 67 29 S 30 59 E, 0-4500 M (B&V).

DEPTH RANGE: 0-4500 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

FIGORELLA TANIDEA J.L.BARNARD

FIGORELLA TANIDEA J.L.BARNARD, 1962D:25, FIGS. 7,8, TABLE 12.

DISTRIBUTION: EAST SCOTIA BASIN: 55 29 S 37 57 W, 3770 M (JLB).

GAINELLA CHELATA CHEVREUX

GAINELLA CHELATA CHEVREUX, 1912:208.
GAINELLA CHELATA. CHEVREUX, 1913:87, FIGS. 1-3.
GAINELLA CHELATA. J.L.BARNARD, 1958B:92.

DISTRIBUTION: ALEXANDER ISLAND: 297 M (EC).

HIPPOMEDON INCISUS K.H.BARNARD

HIPPOMEDON INCISUS K.H.BARNARD, 1930:325, FIG. 5.
HIPPOMEDON INCISUS. J.L.BARNARD, 1958B:92.
HIPPOMEDON INCISUS. BIRSTEIN AND VINOGRADOV, 1962A:38, FIGS. 3,4.
HIPPOMEDON INCISUS. J.L.BARNARD, 1964B:7, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: 50 22 S 167 01 E, 0-150 M (B&V).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

HIPPOMEDON KERGUELENI (MIERS)

LYSIANASSA KERGUELENI MIERS, 1875A:74.
ANONYX KERGUELENI. MIERS, 1879:207, PL. 11, FIG. 4.
HIPPOMEDON KERGUELENI. STEBBING, 1888:625, PL. 8.
HIPPOMEDON HOLBOLLI. DELLA VALLE, 1893:808, (IN PART).
HIPPOMEDON KERGUELENI. THOMSON, 1902:3.
HOPLONYX KERGUELENI. WALKER, 1903A:51, (IN PART).
TRYPHOSA KERGUELENI. STEBBING, 1906:69,720.
TRYPHOSA KERGUELENI. WALKER, 1907:16, (IN PART, PART =TRYPHOSELLA CARINATA).
TRYPHOSA KERGUELENI. CHILTON, 1909A:617.
TRYPHOSA KERGUELENI. STRAUSS, 1909:46, PL. 5, FIGS. 30-35, PL. 6, FIG. 36.
TRYPHOSA KERGUELENI. SHOEMAKER, 1914:74.
? TRYPHOSA KERGUELENI. SCHELLENBERG, 1926A:266, FIG. 15, (QUESTIONED BY J.L.BARNARD, 1962D).
TRYPHOSA KERGUELENI. SCHELLENBERG, 1926B:195.
TRYPHOSA KERGUELENI. SCHELLENBERG, 1931:34.
TRYPHOSA KERGUELENI. K.H.BARNARD, 1932:49, FIG. 13.
TRYPHOSA KERGUELENI. NICHOLLS, 1938:25, FIG. 10.
TRYPHOSA KERGUELENI. STEPHENSEN, 1938:237.
TRYPHOSA KERGUELENI. STEPHENSEN, 1947:34.
TRYPHOSA KERGUELENI. J.L.BARNARD, 1958B:101.
? TRYPHOSA KERGUELENI. J.L.BARNARD, 1962D:30,31, FIG. 15, TABLES 7B,9, (KEY), (QUESTIONED BY THURSTON, 1974A).
HIPPOMEDON KERGUELENI. GURJANOVA, 1962:101, (KEY).
HIPPOMEDON KERGUELENI. J.L.BARNARD, 1964B:8, FIG. 3Q, (KEY).
HIPPOMEDON KERGUELENI. BELLAN-SANTINI, 1965:161,163.
HIPPOMEDON KERGUELENI. J.L.BARNARD, 1967B:38,39,42, TABLE 1.
HIPPOMEDON KERGUELENI. BELLAN-SANTINI, 1972B:691, PL. 8.
TRYPHOSELLA KERGUELENI. BREGAZZI, 1972A:15-30, FIGS. 2,23.
TRYPHOSELLA KERGUELENI. BREGAZZI, 1972B:21-31.
TRYPHOSELLA KERGUELENI. BREGAZZI, 1973A:63-69.
TRYPHOSELLA KERGUELENI. BREGAZZI, 1973B:18-31.
HIPPOMEDON KERGUELENI. BELLAN-SANTINI AND LEDOYER, 1974:685.
TRYPHOSELLA KERGUELENI. THURSTON, 1974A:17, FIGS. 6E-O,7A-U.
HIPPOMEDON KERGUELENI. THURSTON, 1974B:58.
NOT TRYPHOSA KERGUELENI. K.H.BARNARD, 1930:327, (=TRYPHOSELLA MAJOR).

DISTRIBUTION: ADELIE COAST: (DBS); COMMONWEALTH BAY, 518-540 M (GEN).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
KERGUELEN ISLANDS: ROYAL SOUND (EJM); ACCESSIBLE BAY, 36 M; CUMBERLAND BAY, 229 M (TRRS); OBSERVATORY BAY (AS); MORBIHAN BAY, BOSSIERE FJORD, 10-15 M (BS&L).
MARGUERITE BAY: DION ISLANDS, 9 M (MHT).
PALMER ARCHIPELAGO: PORT LOCKROY, LOW TIDE, GOUDIER ISLAND, LOW TIDE (MHT).
QUEEN MARY COAST: SHACKLETON GLACIER, 66 18 S 54 58 E (GEN).
ROSS SEA: CAPE ADARE, 47 M, DUKE OF YORK ISLAND, 11 M; CAPE WADWORTH, 14-27 M; WINTER QUARTERS BAY (AOW).
SOUTH GEORGIA: (MHT); CUMBERLAND BAY, 75-310 M (AS), 230-250 M; OFF 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 122-178 M (KHB); BAY OF ISLES, 9 M (CRS); 'HYSTADHULLET', 16 M; COAL HARBOUR, 12-19 M (KS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 20-25 M (MHT), DOVE CHANNEL, 24-36 M (KHB); FACTORY COVE, BORGE BAY, LITTORAL-20 M (PKB).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 55-91 M (KS); SAUNDERS ISLAND (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (MHT), 5-10 M (KHB), 75 M (KS); BRIDGEMAN ISLAND, 750 M (KS).
TRINITY PENINSULA: 63 36 S 55 48 W, 100-150 M (AS); HOPE BAY, HUT COVE, 9 M (MHT).

DEPTH RANGE: LITTORAL-750 M.

EXTRINSIC DISTRIBUTION: ANGOLA BASIN; SNARES ISLANDS.

HIPPOMEDON MACROCEPHALUS BELLAN-SANTINI

? HIPPOMEDON MACROCEPHALUS BELLAN-SANTINI, 1972A:195, PLS. 16,17.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 50 M (DBS).

HIPPOMEDON MAJOR (K.H.BARNARD)

TRYPHOSA MAJOR K.H.BARNARD, 1932:50, FIG. 14.
TRYPHOSA KERGUELENI. K.H.BARNARD, 1930:327.
TRYPHOSA MAJOR. J.L.BARNARD, 1958B:101.
TRYPHOSA MAJOR. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA MAJOR. J.L.BARNARD, 1969A:365, (BY IMPLICATION).
HIPPOMEDON MAJOR. THURSTON, 1974B:57.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
ROSS SEA: CAPE ADARE, 82-92 M (KHB).
SOUTH GEORGIA: 53 52 S 36 08 W, 160 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 82-342 M.

HIRONDELLEA ANTARCTICA (SCHELLENBERG)

TETRONYCHIA ANTARCTICA SCHELLENBERG, 1926A:251, FIG. 8.
HIRONDELLEA ANTARCTICA. K.H.BARNARD, 1930:319, FIG. 2.
HIRONDELLEA ANTARCTICA. J.L.BARNARD, 1958B:93.
HIRONDELLEA ANTARCTICA. BIRSTEIN AND VINOGRADOV, 1960:184,232.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M; GAUSSBERG, 170 M (AS).
OATES COAST: 329-366 M (KHB).

DEPTH RANGE: 170-385 M.

EXTRINSIC DISTRIBUTION: TONGA TRENCH.

KERGUELENIA ADELIENSIS BELLAN-SANTINI

KERGUELENIA ADELIENSIS BELLAN-SANTINI, 1972A:198, PL. 18.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 70-90 M (DBS).

KERGUELENIA ANTARCTICA K.H.BARNARD

KERGUELENIA ANTARCTICA K.H.BARNARD, 1930:318, FIG. 1B.
KERGUELENIA ANTARCTICA. J.L.BARNARD, 1958B:93.

DISTRIBUTION: ROSS SEA: MCMURDO SOUND, 92 M (KHB).

KERGUELENIA COMPACTA STEBBING

KERGUELENIA COMPACTA STEBBING, 1888:1220, PL. 15A.
KERGUELENIA COMPACTA. STEBBING, 1906:12, FIG. 2.
KERGUELENIA COMPACTA. J.L.BARNARD, 1958B:93.
KERGUELENIA COMPACTA. BELLAN-SANTINI AND LEDOYER, 1974:685, PL. 26.

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS); MORBIHAN BAY 15 M, AUSTRALIA ISLAND, 24 M, KARL LUYKEN SOUND, 30 M, JOLIETTE COVE, 10-54 M (BS&L).

DEPTH RANGE: 10-229 M.

KERGUELENIA GLACIALIS SCHELLENBERG

KERGUELENIA GLACIALIS SCHELLENBERG, 1926A:239, FIG. 1.
KERGUELENIA GLACIALIS. J.L.BARNARD, 1958B:93.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

KERGUELENIA PALPALIS K.H.BARNARD

KERGUELENIA PALPALIS K.H.BARNARD, 1932:28.
KERGUELENIA SPEZ. SCHELLENBERG, 1926A:241, FIG. 2.
KERGUELENIA PALPALIS. J.L.BARNARD, 1958B:93.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).

DEPTH RANGE: 200-385 M.

LEPIDEPECREELLA CTENOPHORA SCHELLENBERG

LEPIDEPECREELLA CTENOPHORA SCHELLENBERG, 1926A:281, FIG. 23.
LEPIDEPECREELLA CTENOPHORA. J.L.BARNARD, 1958B:93.
LEPIDEPECREELLA CTENOPHORA. J.L.BARNARD, 1966A:68,69, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

LEPIDEPECREELLA EMARGINATA NICHOLLS

LEPIDEPECREELLA EMARGINATA NICHOLLS, 1938:31, FIG. 13.
LEPIDEPECREELLA EMARGINATA. J.L.BARNARD, 1958B:93.
LEPIDEPECREELLA EMARGINATA. J.L.BARNARD, 1966A:68, (KEY).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).

LEPIDEPECREELLA OVALIS K.H.BARNARD

LEPIDEPECREELLA OVALIS K.H.BARNARD, 1932:61, FIG. 23.
LEPIDEPECREELLA OVALIS. J.L.BARNARD, 1958B:93.
LEPIDEPECREELLA OVALIS. J.L.BARNARD, 1966A:68, (KEY).

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 120-204 M, OFF 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 122-136 M; 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 120-270 M.

LEPIDEPECREELLA TRIDACTYLA BELLAN-SANTINI

LEPIDEPECREELLA TRIDACTYLA BELLAN-SANTINI, 1972A:200, PLS. 19,20.

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 230-250 M (DBS).

LEPIDEPECREOIDES XENOPUS K.H.BARNARD

LEPIDEPECREOIDES XENOPUS K.H.BARNARD, 1931A:426.
LEPIDEPECREOIDES XENOPUS. K.H.BARNARD, 1932:62, FIG. 24.
LEPIDEPECREOIDES XENOPUS. J.L.BARNARD, 1958B:93.
LEPIDEPECREOIDES XENOPUS. SANDERSON, 1973:36.

DISTRIBUTION: PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-335 M (KHB).
SOUTH GEORGIA: 54 59 S 35 24 W, 130 M (KHB).
SOUTH SHETLAND ISLANDS: OFF DECEPTION ISLAND, 1080 M (KHB).

DEPTH RANGE: 130-1080 M.

LEPIDEPECREUM CINGULATUM K.H.BARNARD

LEPIDEPECREUM CINGULATUM K.H.BARNARD, 1932:60, FIG. 22.
LEPIDEPECREUM CINGULATUM. J.L.BARNARD, 1958B:93.
LEPIDEPECREUM CINGULATUM. THURSTON, 1974A:16, FIG. 6D.
LEPIDEPECREUM CINGULATUM. THURSTON, 1974B:58.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, LOW TIDE (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, DOVE CHANNEL, 24-36 M (KHB), BORGE BAY, 5-15 M, PAAL HARBOUR, 5-15 M (MHT).
TRINITY PENINSULA: HOPE BAY, LOW TIDE, GRUNDEN ROCK, LITTORAL (MHT).

DEPTH RANGE: LOW TIDE-36 M.

LEPIDEPECREUM FORAMINIFERUM STEBBING

LEPIDEPECREUM FORAMINIFERUM STEBBING, 1888:686, PL. 24.
ANONYX LONGICORNIS. DELLA VALLE, 1893:814, (IN PART).
LEPIDEPECREUM FORAMINIFERUM. STEBBING, 1906:79.

LEPIDEPECREUM FORAMINIFERUM. J.L.BARNARD, 1958B:93.
LEPIDEPECREUM FORAMINIFERUM. SURYA RAO, 1974:199.

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS).

EXTRINSIC DISTRIBUTION: INDIA.

LYSIANASSA FALKLANDICA K.H.BARNARD

LYSIANASSA FALKLANDICA K.H.BARNARD, 1932:39, FIG. 7.
ARUGELLA FALKLANDICA. J.L.BARNARD, 1958B:90.
LYSIANASSA FALKLANDICA. J.L.BARNARD, 1969A:295.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, OFF LIVELY ISLAND, 79 M; 49 00 S 61 58 W, 145-146 M (KHB).

DEPTH RANGE: 79-146 M.

LYSIANASSA SUBANTARCTICA (SCHELLENGERG)

ARUGA SUBANTARCTICA SCHELLENBERG, 1931:9, FIG. 3.
ARUGA SUBANTARCTICA. J.L.BARNARD, 1958B:90.
LYSIANOPSIS SUBANTARCTICA. HURLEY, 1963:72,74,75, (KEY).
LYSIANASSA SUBANTARCTICA. J.L.BARNARD, 1969A:295.

DISTRIBUTION: MAGELLANIC AREA: HARRIS BAY, 27 M; PUERTO CONDOR, 90 M; USHUAIA BAY, 11-27 M (AS).

DEPTH RANGE: 11-90 M.

NANNONYX INTEGRICAUDA (STEBBING)

AMBASIA INTEGRICAUDA STEBBING, 1888:695, PL. 26.
NANNONYX INTEGRICAUDA. STEBBING, 1906:35.
NANNONYX INTEGRICAUDA. J.L.BARNARD, 1958B:95.

DISTRIBUTION: KERGUELEN ISLANDS: ROYAL SOUND, 50 M (TRRS).

NEOAMBASIA TUMICORNIS (NICHOLLS)

AMBASIOPSIS TUMICORNIS NICHOLLS, 1938:21, FIG. 7.
AMBASIOPSIS TUMICORNIS. J.L.BARNARD, 1958B:89.
NEOAMBASIA TUMICORNIS. DAHL, 1959:219.
NEOAMBASIA TUMICORNIS. BELLAN-SANTINI, 1972A:202, PL. 21.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 108-720 M (GEN); CAPE JULES, 5-20 M; GEOLOGIE ARCHIPELAGO, 60-90 M; CAPE GEODESIE, 230-250 M (DBS). DAVIS SEA: 432 M (GEN).

DEPTH RANGE: 5-720 M.

ORCHOMENE ABYSSORUM STEBBING

ORCHOMENE ABYSSORUM STEBBING, 1888:676, PL. 21.
ORCHOMENE OBTUSA SARS, 1895:74, PL. 26, FIG. 2.
ANONYX ABYSSORUM. DELLA VALLE, 1893:824.
ORCHOMENOPSIS ABYSSORUM. CHEVREUX, 1900:23.
ORCHOMENOPSIS ABYSSORUM. CHEVREUX, 1903:92.
ORCHOMENOPSIS ABYSSORUM. WALKER, 1903B:232.
ORCHOMENOPSIS ABYSSORUM. CHEVREUX, 1905C:7.
ORCHOMENOPSIS ABYSSORUM. STEBBING, 1906:84, FIG. 14, (IN PART, PART= ORCHOMENE CHILENSIS).
ORCHOMENOPSIS ABYSSORUM. STEPHENSEN, 1925:125.
ORCHOMENOPSIS CHILENSIS FORMA ABYSSORUM. SCHELLENBERG, 1926A:291, FIG. 27.
ORCHOMENELLA ABYSSORUM. K.H.BARNARD, 1932:69, FIGS. 27B,28.
ORCHOMENELLA ABYSSORUM. NICHOLLS, 1938:35, FIG. 15.
ORCHOMENELLA ABYSSORUM. RUFFO, 1949:10.
ORCHOMENOPSIS ABYSSORUM. DAHL, 1954:282.
ORCHOMENELLA ABYSSORUM. SCHELLENBERG, 1955:192.
ORCHOMENELLA ABYSSORUM. J.L.BARNARD, 1958B:96.
ORCHOMENELLA ABYSSORUM. DAHL, 1959:225.
ORCHOMENELLA ABYSSORUM. BIRSTEIN AND VINOGRADOV, 1960:188,227,232, FIG. 8.

ORCHOMENELLA ABYSSORUM. BIRSTEIN AND VINOGRADOV, 1962A:41.
ORCHOMENELLA ABYSSORUM. HURLEY, 1963:125,126.
ORCHOMENE ABYSSORUM. J.L.BARNARD, 1964A:86,89, (KEY).
ORCHOMENELLA ABYSSORUM. SANDERSON, 1973:37.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
QUEEN MARY COAST: SHACKLETON GLACIER, 66 18 S 54 58 E, 486 M (GEN).
ROSS SEA: 'DISCOVERY INLET', 550 M (ED).
SOUTHERN OCEAN: INDIAN SECTOR, 62 55 S 118 52 E, 0-3700 M; PACIFIC SECTOR, 63 18 S 135 14 E, 0-3600 M; 66 08 S 128 25 E, 210-550 M (B&V).
SOUTH SHETLAND ISLANDS: LIVINGSTON ISLAND, 0-800 M (KHB).

DEPTH RANGE: 0-3700 M.

EXTRINSIC DISTRIBUTION: ARGENTINA; KERMADEC TRENCH; MEDITERRANEAN SEA; NEW ZEALAND; NORTH ATLANTIC OCEAN; NORWAY.

ORCHOMENE ACANTHURUS (SCHELLENBERG)

ORCHOMENOPSIS ACANTHURUS SCHELLENBERG, 1931:47, FIG. 25.
ORCHOMENELLA ACANTHURUS. K.H.BARNARD, 1932:73, FIGS. 27A,31.
ORCHOMENELLA ACANTHURA. SHOEMAKER, 1945A:289.
ORCHOMENELLA ACANTHURUS. RUFFO, 1949:10.
ORCHOMENELLA ACANTHURUS. J.L.BARNARD, 1958B:96.
ORCHOMENE ACANTHURUS. J.L.BARNARD, 1964A:86, (KEY).
ORCHOMENE ACANTHURUS. THURSTON, 1974B:59.

DISTRIBUTION: MARGUERITE BAY: STONINGTON ISLAND, 64 M (MHT).
PALMER ARCHIPELAGO: HORSESHOE ISLAND, 67 52 S 67 17 W, 34 M (CRS).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M; OFF GRYTVIKEN, 22 M; 53 34 S 43 23 W, 160 M (AS); CUMBERLAND EAST BAY, 17-40 M; STROMNESS HARBOUR, 26-35 M; 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 17-160 M.

ORCHOMENE ARNAUDI BELLAN-SANTINI

ORCHOMENE ARNAUDI BELLAN-SANTINI, 1972A:205, PL. 22.

DISTRIBUTION: ADELIE COAST: CAPE JULES, 5-20 M (DBS).

ORCHOMENE CAVIMANUS STEBBING

ORCHOMENE CAVIMANUS STEBBING, 1888:679, PL. 22.
ORCHOMENOPSIS ZSCHAUII. STEBBING, 1906:85, (IN PART).
ORCHOMENELLA CAVIMANUS. SCHELLENBERG, 1926A:285, FIG. 25.
ORCHOMENELLA CAVIMANUS. K.H.BARNARD, 1932:69, FIG. 27G.
ORCHOMENELLA CAVIMANUS. NICHOLLS, 1938:34, FIG. 14.
ORCHOMENELLA CAVIMANA. RUFFO, 1949:10.
ORCHOMENELLA CAVIMANUS. J.L.BARNARD, 1958B:96.
? ORCHOMENELLA CAVIMANUS. J.L.BARNARD, 1961:45, FIG. 16, (QUESTIONED BY BELLAN-SANTINI, 1972A).
ORCHOMENE CAVIMANUS. J.L.BARNARD, 1964A:87, (KEY).
ORCHOMENE CAVIMANUS. BELLAN-SANTINI, 1972A:207, PL. 23.
ORCHOMENE CAVIMANUS. BELLAN-SANTINI, 1972B:693.
ORCHOMENELLA CAVIMANUS. SANDERSON, 1973:37.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-283 M (GEN); GEOLOGIE ARCHIPELAGO, 6-60 M (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
FALKLAND ISLANDS: EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).
KERGUELEN ISLANDS: BETSY COVE, SURFACE; CUMBERLAND BAY, 229 M (TRRS).
SOUTH GEORGIA: 53 51 S 36 18 W, 245 M (KHB).

DEPTH RANGE: SURFACE-385 M.

EXTRINSIC DISTRIBUTION: TASMAN SEA.

ORCHOMENE CAVIMANUS ROSTRATUS (SCHELLENBERG)

ORCHOMENELLA CAVIMANUS ROSTRATUS SCHELLENBERG, 1931:45, FIG. 23.

DISTRIBUTION: FALKLAND ISLANDS: 53 S 64 W (AS).

ORCHOMENE CHARCOTI (CHEVREUX)

ORCHOMENOPSIS CHARCOTI CHEVREUX, 1912:209.
ORCHOMENOPSIS CHARCOTI. CHEVREUX, 1913:92, FIGS. 4-6.
ORCHOMENOPSIS CHARCOTI. SCHELLENBERG, 1931:49.
ORCHOMENELLA CHARCOTI. K.H.BARNARD, 1932:70, FIG. 27F.
ORCHOMENELLA CHARCOTI. RUFFO, 1949:10.
ORCHOMENELLA CHARCOTI. J.L.BARNARD, 1958B:96.
ORCHOMENE CHARCOTI. J.L.BARNARD, 1964A:89, (KEY).

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
PALMER ARCHIPELAGO: PORT LOCKROY, NEUMAYER CHANNEL, 60-70 M (EC).
TRINITY PENINSULA: 64 36 S 57 42 W, 125 M (AS).

DEPTH RANGE: 60-200 M.

ORCHOMENE CHELIPES (WALKER)

ORCHOMENELLA CHELIPES WALKER, 1906A:456.
ORCHOMENELLA CHELIPES. WALKER, 1907:13, PL. 4, FIG. 7.
ORCHOMENELLA CHELIPES. K.H.BARNARD, 1932:68, FIG. 27L.
ORCHOMENELLA CHELIPES. RUFFO, 1949:10.
ORCHOMENELLA CHELIPES. J.L.BARNARD, 1958B:96.
ORCHOMENE CHELIPES. J.L.BARNARD, 1964A:88, (KEY).

DISTRIBUTION: ROSS SEA: WINTER QUARTERS BAY, 18 M (AOW).

ORCHOMENE CHILENSIS (HELLER)

ANONYX CHILENSIS HELLER, 1865:129, PL. 11, FIG. 5.
ORCHOMENOPSIS ABYSSORUM. STEBBING, 1906:84, FIG. 14, (IN PART).
? ORCHOMENOPSIS CHILENSIS. K.H.BARNARD, 1925:330.
ORCHOMENOPSIS CHILENSIS FORMA CHILENSIS. SCHELLENBERG, 1926A:293, FIG. 29.
ORCHOMENOPSIS CHILENSIS F. CHILENSIS. SCHELLENBERG, 1931:48.
ORCHOMENELLA CHILENSIS. RUFFO, 1949:8.
ORCHOMENELLA CHILENSIS. J.L.BARNARD, 1958B:96.
ORCHOMENE CHILENSIS. J.L.BARNARD, 1964A:85.
ORCHOMENELLA CHILENSIS. HURLEY, 1965C:183, FIGS. 1,2.
NOT ORCHOMENOPSIS CHILENSIS. CHILTON, 1912:473, (=ORCHOMENE PLEBS IN PART AND ORCHOMENE ROSSI IN PART).
NOT ORCHOMENELLA CHILENSIS. ARMITAGE, 1962:225-232, FIGS. 1-3, TABLES 1,2, (PROBABLY =ORCHOMENE PLEBS IN PART AND ORCHOMENE ROSSI IN PART).

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M; BERKELEY SOUND, 16 M; PORT WILLIAM, 40 M (AS).
MAGELLANIC AREA: PUERTO BUENO; SMYTH CHANNEL, ISTHMUS BAY, 18 M; PUNTA ARENAS; PUERTO HOPE, 11-18 M; ALMIRANTAZGO SOUND, 36 M; PUERTO PANTALON (AS).

DEPTH RANGE: 11-40 M.

ORCHOMENE FRANKLINI (WALKER)

ORCHOMENELLA FRANKLINI WALKER, 1903A:47, PL. 8, FIGS. 31-36.
ORCHOMENELLA FRANKLINI. STEBBING, 1906:721.
ORCHOMENELLA FRANKLINI. WALKER, 1907:13.
ORCHOMENELLA FRANKLINI. K.H.BARNARD, 1930:448.
ORCHOMENELLA FRANKLINI. K.H.BARNARD, 1932:68, FIG. 27K.
ORCHOMENELLA FRANKLINI. NICHOLLS, 1938:37, FIG. 17.
ORCHOMENELLA ? FRANKLINI. STEPHENSEN, 1947:36.
ORCHOMENELLA FRANKLINI. RUFFO, 1949:10.
ORCHOMENELLA FRANKLINI. J.L.BARNARD, 1958B:96.
ORCHOMENELLA FRANKLINI. HURLEY, 1963:133.
ORCHOMENE FRANKLINI. J.L.BARNARD, 1964A:87,88, (KEY).
ORCHOMENELLA FRANKLINI. HURLEY, 1965B:162, FIGS. 5,6.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY (GEN).
ROSS SEA: FRANKLIN ISLAND, 18-43 M; WINTER QUARTERS BAY (AOW); MCMURDO SOUND, 13-36 M (KHB).
SOUTH SANDWICH ISLANDS: ZAVODOVSKI ISLAND, 56 17 S 27 30 W (KS).

DEPTH RANGE: 13-43 M.

ORCHOMENE GALEATA (SCHELLENBERG)

ALLOGAUSSIA GALEATA SCHELLENBERG, 1926A:249, FIG. 7.
ALLOGAUSSIA GALEATA. J.L.BARNARD, 1958B:88.

ALLOGAUSSIA GALEATA. HURLEY, 1963:133.
ORCHOMENE GALEATA. J.L.BARNARD, 1964A:88, FIG. 8E, (KEY).

DISTRIBUTION: DAVIS SEA: GAUSSBERG, 170 M (AS).

ORCHOMENE GONIOPS WALKER

ORCHOMENE GONIOPS WALKER, 1906A:455.
ORCHOMENE GONIOPS. WALKER, 1907:12, PL. 3, FIG. 6.
ORCHOMENELLA GONIOPS. K.H.BARNARD, 1932:68, FIG. 27M.
ORCHOMENE GONIOPS. J.L.BARNARD, 1958B:96.
ORCHOMENE GONIOPS. J.L.BARNARD, 1964A:87, (KEY).

DISTRIBUTION: ROSS SEA: WINTER QUARTERS BAY (AOW).

ORCHOMENE HUREAUI DE BROYER

ORCHOMENE HUREAUI DE BROYER, !973:2, FIGS. 1-4.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO (CDB).

ORCHOMENE LITORALIS (SCHELLENBERG)

ALLOGAUSSIA LITORALIS SCHELLENBERG, 1926A:248, FIG. 6.
ALLOGAUSSIA LITORALIS. J.L.BARNARD, 1958B:88.
ALLOGAUSSIA LITORALIS. HURLEY, 1963:133.
ORCHOMENE LITORALIS. J.L.BARNARD, 1964A:84,88, (KEY), (POSSIBLE JUNIOR SYNONYM OF ORCHOMENE FRANKLINI).
ORCHOMENE LITORALIS. BELLAN-SANTINI, 1972A:207, PLS. 24,25.
ORCHOMENE LITORALIS. BELLAN-SANTINI, 1972B:695.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 6-15 M (DBS).
DAVIS SEA: GAUSSBERG, 170 M (AS).

DEPTH RANGE: 6-170 M.

ORCHOMENE MACRONYX (CHEVREUX)

ORCHOMENELLA MACRONYX CHEVREUX, 1905D:161, FIG. 2.
ORCHOMENELLA MACRONYX. CHEVREUX, 1906E:8, FIGS. 5-7.
ORCHOMENELLA MACRONYX. STEBBING, 1906:721.
ORCHOMENELLA MACRONYX. K.H.BARNARD, 1932:70, FIG. 27D, (IN PART, PART =ORCHOMENE SCHELLENBERGI; NOT FIG. 29).
ORCHOMENELLA MACRONYX. NICHOLLS, 1938:37, FIG. 18.
ORCHOMENELLA MACRONYX. RUFFO, 1949:10.
ORCHOMENELLA MACRONYX. J.L.BARNARD, 1958B:97.
ORCHOMENE MACRONYX. J.L.BARNARD, 1964A:89, (KEY).
ORCHOMENE MACRONYX. BELLAN-SANTINI, 1972A:212, PL. 26.
ORCHOMENE MACRONYX. THURSTON, 1972:51, FIGS. 1,2.
NOT ORCHOMENELLA MACRONYX. CHILTON, 1912:470, (=ORCHOMENE SP. JUV.).
NOT ORCHOMENELLA MACRONYX. SCHELLENBERG, 1931:43, FIG. 22, (=ORCHOMENE SCHELLENBERGI).

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 55-60 M (DBS).
DAVIS SEA: 216 M (GEN).
SOUTH GEORGIA: OFF 'JASON LIGHT', 238-270 M; CUMBERLAND BAY, 230-250 M; CUMBERLAND EAST BAY, 200-234 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC).
WILHELM ARCHIPELAGO: 'CARTHAGE BAY', 40 M; PORT CHARCOT, 40 M (EC).

DEPTH RANGE: 40-270 M.

ORCHOMENE MACROPHTHALMA (BIRSTEIN AND VINOGRADOV) NEW COMBINATION

ALLOGAUSSI MACROPHTHALMA BIRSTEIN AND VINOGRADOV, 1962A:39, FIG. 5.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR, 65 06 S 111 24 E, 0-2000 M (B&V).

ORCHOMENE MORBIHANENSIS BELLAN-SANTINI AND LEDOYER

ORCHOMENE MORBIHANENSIS BELLAN-SANTINI AND LEDOYER, 1974:686, PL. 27.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, PENDER ISLAND, 50 M (BS&L).

ORCHOMENE NAVICULA (K.H.BARNARD)

ALLOGAUSSIA NAVICULA K.H.BARNARD, 1932:65, FIG. 25.
ALLOGAUSSIA NAVICULA. J.L.BARNARD, 1958B:88.
ALLOGAUSSIA NAVICULA. HURLEY, 1963:133.
ORCHOMENE NAVICULA. J.L.BARNARD, 1964A:88, FIG. 8J, (KEY).

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 200-342 M.

ORCHOMENE NODIMANUS (WALKER)

ORCHOMENOPSIS NODIMANUS WALKER, 1903A:44, PL. 7, FIGS. 13-17.
ORCHOMENELLA NODIMANA. STEBBING, 1906:721.
ORCHOMENOPSIS NODIMANUS. CHILTON, 1912:473.
ORCHOMENOPSIS NODIMANUS. CHILTON, 1925A:176.
ORCHOMENELLA NODIMANUS. K.H.BARNARD, 1932:68, FIG. 27I.
ORCHOMENELLA NODIMANUS. NICHOLLS, 1938:36, FIG. 16.
ORCHOMENELLA NODIMANA. RUFFO, 1949:10.
ORCHOMENELLA NODIMANUS. J.L.BARNARD, 1958B:97.
ORCHOMENE NODIMANUS. J.L.BARNARD, 1964A:89, (KEY).
ORCHOMENE NODIMANUS. BELLAN-SANTINI, 1972A:212, PL. 27.
ORCHOMENE NODIMANUS. BELLAN-SANTINI, 1972B:695.
ORCHOMENE NODIMANUS. THURSTON, 1974A:20.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 10-90 M (DBS).
ROSS SEA: CAPE ADARE, 47 M (AOW).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, BORGE BAY, 5-10 M, PAAL HARBOUR, 20-25 M (MHT).

DEPTH RANGE: 5-90 M.

ORCHOMENE PARADOXA (SCHELLENBERG)

ALLOGAUSSIA PARADOXA SCHELLENBERG, 1926A:246, FIG. 5.
ALLOGAUSSIA PARADOXA. J.L.BARNARD, 1958B:88.
ALLOGAUSSIA PARADOXA. HURLEY, 1963:133.
ORCHOMENE PARADOXA. J.L.BARNARD, 1964A:84,88, FIG. 8N, (KEY).

DISTRIBUTION: DAVIS SEA: GAUSSBERG, 70 M (AS).

ORCHOMENE PINGUIDES (WALKER)

ORCHOMENELLA PINGUIDES WALKER, 1903A:46, PL. 8, FIGS. 24-30.
ORCHOMENELLA PINGUIDES. STEBBING, 1906:721.
ORCHOMENELLA PINGUIDES. WALKER, 1907:13.
? ORCHOMENELLA PINGUIDES. CHILTON, 1912:470, (QUESTIONED BY BELLAN-SANTINI, 1972B).
ORCHOMENELLA PINGUIDES. SCHELLENBERG, 1926A:284, FIG. 24.
ORCHOMENELLA PINGUIDES. K.H.BARNARD, 1930:327,448.
ALLOGAUSSIA LOBATA K.H.BARNARD, 1932:67, FIG. 26.
ORCHOMENELLA PINGUIDES. K.H.BARNARD, 1932:68, FIG. 27J.
ORCHOMENELLA PINGUIDES. RUFFO, 1949:10.
ORCHOMENELLA PINGUIDES. J.L.BARNARD, 1958B:97.
ALLOGAUSSIA LOBATA. HURLEY, 1963:133.
ORCHOMENELLA PINGUIDES. HURLEY, 1963:133.
ORCHOMENE PINGUIDES. J.L.BARNARD, 1964A:88, (KEY).
ORCHOMENELLA PINGUIDES. HURLEY, 1965B:159, FIGS. 3,4.
ORCHOMENELLA PINGUIDES. DEARBORN, 1967:45.
ORCHOMENELLA PINGUIDES. EMISON, 1968:202, FIG. 10, TABLES 10-12.
ORCHOMENE PINGUIDES. BELLAN-SANTINI, 1972B:695, PL. 9.

DISTRIBUTION: ADELIE COAST: (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M; GAUSSBERG, 170 M (AS).
ROSS SEA: CAPE ADARE; WINTER QUARTERS BAY, 18-27 M (AOW); MCMURDO SOUND, (JHD), 4-175 M (KHB); CAPE CROZIER (WBE).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 88-273 M (KHB).

SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; LIVINGSTON ISLAND, 0-800 M (KHB).

DEPTH RANGE: 0-800 M.

ORCHOMENE PLEBS (HURLEY)

ORCHOMENELLA PLEBS HURLEY, 1965A:109, FIGS. 1,2.
ORCHOMENOPSIS PROXIMA. CHEVREUX, 1906E:13.
ORCHOMENOPSIS ROSSI. WALKER, 1907:14, (IN PART).
ORCHOMENOPSIS CHILENSIS. CHILTON, 1912:473, (IN PART, PART =ORCHOMENE ROSSI).
ORCHOMENOPSIS CHILENSIS FORMA PROXIMA. SCHELLENBERG, 1926A:290.
ORCHOMENOPSIS CHILENSIS FORMA ROSSI. K.H.BARNARD, 1930:327,449.
ORCHOMENELLA ROSSI. K.H.BARNARD, 1932:69, FIG. 27E, (IN PART).
ORCHOMENELLA CHILENSIS FORMA PROXIMA. SHOEMAKER, 1945A:289.
ORCHOMENELLA PROXIMA. RUFFO, 1949:10.
ORCHOMENELLA CHILENSIS. ARMITAGE, 1962:225-232, FIGS. 1-3, TABLES 1,2, (IN PART, PART =ORCHOMENE ROSSI).
ORCHOMENELLA PROXIMA. LITTLEPAGE AND PEARSE, 1962:680.
ORCHOMENELLA PROXIMA. PEARSE, 1963:43.
ORCHOMENELLA PLEBS. DEARBORN, 1967:45.
ORCHOMENELLA PLEBS. EMISON, 1968:202, FIG. 10, TABLES 10-12.
ORCHOMENELLA PLEBS. HOLLOWAY, 1969:188.
ORCHOMENELLA PLEBS. ARNAUD, 1970:261.
ORCHOMENE PLEBS. BELLAN-SANTINI, 1972A:212.
ORCHOMENE PLEBS. THURSTON, 1974B:59, (APPENDIX A).

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 66 40 S 139 51 E, 320 M (DBS).
COATS LAND: 74 01 S 22 W, 290 M (CC).
DAVIS SEA: 'GAUSS STATION', 385 M; GAUSSBERG, 170 M (AS).
PALMER ARCHIPELAGO: 'EAST BASE' (CRS); PORT LOCKROY, 7 M (KHB), 27 M, GOUDIER ISLAND (MHT); SCHOLLAERT CHANNEL, MELCHIOR HARBOUR, 17-335 M; ANVERS ISLAND, FOURNIER BAY, 36 M (KHB).
ROSS SEA: WHITE ISLAND (DEH), (L&P); CAPE ARMITAGE, 240 M (KBA); 77 51 S 166 40 E (HLH); CAPE CROZIER; BEAUFORT ISLAND; FRANKLIN ISLAND (WBE); MCMURDO SOUND, 13-180 M (KHB); WINTER QUARTERS BAY, 26 M (AOW).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-49 M (CC).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, PORT FOSTER, 5-60 M; LIVINGSTON ISLAND, 0-800 M (KHB).
TRINITY PENINSULA: HOPE BAY, HUT COVE, 9 M (MHT).
WILHELM ARCHIPELAGO: PORT CHARCOT, 20 M (EC).

DEPTH RANGE: 0-800 M.

ORCHOMENE REDUCTA (SCHELLENBERG)

ORCHOMENOPSIS REDUCTA SCHELLENBERG, 1931:49, FIG. 26.
ORCHOMENELLA REDUCTA. RUFFO, 1949:10,11, FIG. 1.
ORCHOMENELLA REDUCTA. J.L.BARNARD, 1958B:97.
ORCHOMENE REDUCTA. J.L.BARNARD, 1964A:89, (KEY).

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 15 S 85 06 W (SR).
FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).

ORCHOMENE ROSSI (WALKER)

ORCHOMENOPSIS ROSSI WALKER, 1903A:45, PL. 7, FIGS. 18-23.
ORCHOMENELLA ROSSI. STEBBING, 1906:721.
ORCHOMENOPSIS ROSSI. WALKER, 1907:14, (IN PART, PART =ORCHOMENE PLEBS).
ORCHOMENOPSIS ROSSI. STRAUSS, 1909:12-14, PL. 1, FIGS. 1-4, PL. 2, FIG. 12.
ORCHOMENOPSIS CHILENSIS. CHILTON, 1912:473, (IN PART, PART =ORCHOMENE PLEBS).
ORCHOMENOPSIS ROSSI. CHEVREUX, 1913:92.
ORCHOMENOPSIS CHILENSIS FORMA ROSSI. SCHELLENBERG, 1926A:288, FIG. 26.
ORCHOMENOPSIS CHILENSIS F. ROSSI. SCHELLENBERG, 1931:49.
ORCHOMENELLA ROSSI. K.H.BARNARD, 1932:69, FIG. 27E, (IN PART, PART =ORCHOMENE PLEBS).
ORCHOMENELLA ROSSI. NICHOLLS, 1938:38, FIG. 19.
ORCHOMENELLA CHILENSIS FORMA ROSSI. SHOEMAKER, 1945A:289.
ORCHOMENELLA ROSSI. STEPHENSEN, 1947:35.
ORCHOMENELLA ROSSI. RUFFO, 1949:10.
ORCHOMENOPSIS ROSSI. DAHL, 1954:282.
ORCHOMENELLA CHILENSIS. ARMITAGE, 1962:225-232, FIGS. 1-3, TABLES 1,2, (IN PART, PART =ORCHOMENE PLEBS).
ORCHOMENE ROSSI. J.L.BARNARD, 1964A:89, (KEY).

ORCHOMENELLA ROSSI. HURLEY, 1965B:155, FIGS. 1,2.
ORCHOMENELLA ROSSI. DEARBORN, 1967:45.
ORCHOMENELLA ROSSI. EMISON, 1968:202, FIG. 10, TABLES 10-12.
ORCHOMENELLA ROSSI. HOLLOWAY, 1969:188.
ORCHOMENELLA ROSSI. ARNAUD, 1970:261.
ORCHOMENE ROSSI. BELLAN-SANTINI, 1972A:215.
ORCHOMENE ROSSI. BELLAN-SANTINI, 1972B:695.
ORCHOMENE ROSSI. THURSTON, 1974B:59, (APPENDIX A).
NOT ORCHOMENOPSIS CHILENSIS FORMA ROSSI. K.H.BARNARD, 1930:327,449, (=ORCHOMENE PLEBS).

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 66 40 S 139 51 E, 115-320 M; GEOLOGIE ARCHIPELAGO, 7-40 M (DBS).
COATS LAND: 74 01 S 22 W, 290 M (CC).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: STONINGTON ISLAND, SURFACE (MHT).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-335 M; PORT LOCKROY, 7 M (KHB).
QUEEN MARY COAST: SHACKLETON GLACIER, 66 18 S 54 58 E, 7-486 M (GEN).
ROSS SEA: FRANKLIN ISLAND, 78 35 S, SURFACE; MCMURDO SOUND, 27-311 M; WINTER QUARTERS BAY, 234 M, CAPE ARMITAGE, 9 M (AOW), 240 M (KBA); 'DISCOVERY INLET', 550-560 M (ED); BAY OF WHALES (CRS); 77 51 S 166 40 E (HLH); FRANKLIN ISLAND; CAPE CROZIER; BEAUFORT ISLAND (WBE).
SOUTH GEORGIA: OFF GRYTVIKEN; 'SUDFJORD', 210 M (AS); CUMBERLAND BAY, 120-250 M; OFF 'JASON LIGHT', 238-270 M; JASON HARBOUR, 60-160 M; 54 01 S 35 14 W, 53 M; CUMBERLAND EAST BAY, 0-273 M (KHB), 139-245 M (KS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-49 M (CC).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, PORT FOSTER, 5-60 M; LIVINGSTON ISLAND, 0-800 M (KHB).
TRINITY PENINSULA: 63 48 S 55 50 W (AS).
WILHELM ARCHIPELAGO: PETERMANN ISLAND (EC).

DEPTH RANGE: 0-800 M.

ORCHOMENE ROTUNDIFRONS (K.H.BARNARD)

ORCHOMENELLA ROTUNDIFRONS K.H.BARNARD, 1932:72, FIGS. 27C,30.
ORCHOMENELLA ROTUNDIFRONS. RUFFO, 1949:10.
ORCHOMENELLA ROTUNDIFRONS. J.L.BARNARD, 1958B:97.
ORCHOMENE ROTUNDIFRONS. J.L.BARNARD, 1964A:87, (KEY).
ORCHOMENE ROTUNDIFRONS. THURSTON, 1974A:20, FIG. 72.
ORCHOMENE ROTUNDIFRONS. THURSTON, 1974B:60.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-15 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 5-10 M (KHB).
TRINITY PENINSULA: HOPE BAY, HUT COVE, 9 M (MHT).

DEPTH RANGE: 5-15 M.

ORCHOMENE SCHELLENBERGI THURSTON

ORCHOMENE SCHELLENBERGI THURSTON, 1972:55, FIGS. 3,4.
ORCHOMENELLA MACRONYX. SCHELLENBERG, 1931:43, FIG. 22.
ORCHOMENELLA MACRONYX. K.H.BARNARD, 1932:70, FIG. 29, (IN PART, PART =ORCHOMENE MACRONYX; NOT FIG. 27).

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, CARENAGE CREEK, 51 32 S 58 07 W, 1 M (AS).
SOUTH GEORGIA: ANTARCTIC BAY, 54 12 S 36 50 W, 250 M; OFF GRYTVIKEN, 22 M; CUMBERLAND BAY, 252-310 M (AS), 120-250 M (KHB); CUMBERLAND EAST BAY, 179-235 M; OFF 'JASON LIGHT', 238-270 M (KHB).
TRINITY PENINSULA: 63 36 S 55 50 W, 100-150 M; 64 36 S 57 42 W, 125 M (AS).

DEPTH RANGE: 1-310 M.

ORCHOMENE TABARINI THURSTON

ORCHOMENE TABARINI THURSTON, 1972:58, FIGS. 5,6.
ORCHOMENE TABARINI. THURSTON, 1974B:60.

DISTRIBUTION: TRINITY PENINSULA: HOPE BAY, 55-73 M (MHT).

ORCHOMENE ULTIMA BELLAN-SANTINI

ORCHOMENE ULTIMA BELLAN-SANTINI, 1972B:697, PL. 10.

DISTRIBUTION: ADELIE COAST: (DBS).

ORCHOMENE ZSCHAUII (PFEFFER)

ANONYX ZSCHAUII PFEFFER, 1888:87, PL. 2, FIG. 1.
ANONYX ZSCHAUII. DELLA VALLE, 1893:823.
ORCHOMENOPSIS ZSCHAUII. STEBBING, 1906:85, (IN PART, PART =ORCHOMENE CAVIMANUS).
WALDECKIA ZSCHAUI. SHOEMAKER, 1914:73.
ORCHOMENOPSIS ZSCHAUI. SCHELLENBERG, 1931:46, FIG. 24.
ORCHOMENELLA ZSCHAUII. K.H.BARNARD, 1932:73, FIG. 27H.
ORCHOMENOPSIS ZSCHAUI. STEPHENSEN, 1938:237.
ORCHOMENELLA ZSCHAUI. STEPHENSEN, 1947:35.
ORCHOMENELLA ZSCHAUII. RUFFO, 1949:8.
ORCHOMENELLA ZSCHAUI. J.L.BARNARD, 1958B:97.
ORCHOMENE ZSCHAUII. J.L.BARNARD, 1964A:86, (KEY).
NOT WALDECKIA ZSCHAUII. CHILTON, 1912:471, (=WALDECKIA OBESA).
NOT WALDECKIA ZSCHAUI. CHILTON, 1913:56, (=WALDECKIA OBESA).

DISTRIBUTION: PALMER ARCHIPELAGO: FLANDRES BAY, 2-10 M (KS).
SOUTH GEORGIA: (GP); BAY OF ISLES, 9 M (CRS); OFF GRYTVIKEN, 1-50 M; STROMNESS HARBOUR, 8 M; CUMBERLAND BAY, 250-310 M (AS); CUMBERLAND EAST BAY, 11-36 M (KHB); GODTHUL BAY, 55 M; 'HYSTADHULLET', 40 M; COAL HARBOUR, 13-18 M; JASON HARBOUR, 20 M (KS).
SOUTH SANDWICH ISLANDS: ZAVODOVSKI ISLAND, 56 17 S 27 30 W; VISOKOI ISLAND, 10-15 M (KS).

DEPTH RANGE: 1-310 M.

PACHYCHELIUM ANTARCTICUM SCHELLENBERG

PACHYCHELIUM ANTARCTICUM SCHELLENBERG, 1926A:296, FIG. 30.
PACHYCHELIUM ANTARCTICUM. SCHELLENBERG, 1931:19, FIG. 8.
PACHYCHELIUM DAVIDIS. K.H.BARNARD, 1932:75, FIG. 32.
PACHYCHELIUM ANTARCTICUM. NICHOLLS, 1938:14, FIG. 3.
PACHYCHELIUM ANTARCTICUM. J.L.BARNARD, 1958B:97.
PACHYCHELIUM ANTARCTICUM. BELLAN-SANTINI, 1972A:215, PL. 28.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45-720 M (GEN); CAPE GEODESIE, 115-240 M (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
FALKLAND ISLANDS: BERKELEY SOUND, 16 M (AS); PORT STANLEY, 1-2 M (KHB).
MAGELLANIC AREA: PUNTA ARENAS; PICTON ISLAND, BANNER COVE, 5 M; ULTIMA ESPERANZA, 13-18 M (AS).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 179-235 M (KHB).

DEPTH RANGE: 1-720 M.

PACHYCHELIUM OCULATUM SCHELLENBERG

PACHYCHELIUM OCULATUM SCHELLENBERG, 1931:20, FIG. 9.
PACHYCHELIUM OCULATUM. J.L.BARNARD, 1958B:97.

DISTRIBUTION: SOUTH GEORGIA: OFF GRYTVIKEN, 25-50 M (AS).

PARACALLISOMA ALBERTI CHEVREUX

PARACALLISOMA ALBERTI CHEVREUX, 1903:84, FIGS. 2,3.
PARACALLISOMA ALBERTI. STEBBING, 1906:719.
SCOPELOCHEIRUS COECUS HOLMES. 1908:500, FIGS. 10-12.
PARACALLISOMA ALBERTI. SCHELLENBERG, 1926A:258, FIG. 11.
PARACALLISOMA ALBERTI. CHEVREUX, 1935:39, FIGS.
SCOPELOCHEIRUS COECUS. J.L.BARNARD, 1954C:54.
PARACALLISOMA ALBERTI. BIRSTEIN AND VINOGRADOV, 1955:223,277,279,284, FIG. 32.
PARACALLISOMA ALBERTI. SCHELLENBERG, 1955:191.
PARACALLISOMA ALBERTI. J.L.BARNARD, 1958B:97.
PARACALLISOMA COECUS. J.L.BARNARD, 1958B:97.
PARACALLISOMA ALBERTI. BIRSTEIN AND VINOGRADOV, 1958:228,253.

PARACALLISOMA ALBERTI. BIRSTEIN AND VINOGRADOV, 1960:176,227,232, FIGS. 5,33.
PARACALLISOMA ALBERTI. BIRSTEIN AND VINOGRADOV, 1962A:34.
PARACALLISOMA ALBERTI. GURJANOVA, 1962:309, FIG. 102.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR, 62 55 S 118 52 E, 0-3700 M; 67 29 S 30 59 E, 0-4500 M (B&V); 61 58 S 95 01 E, 2000 M (AS).

DEPTH RANGE: 0-4500 M.

EXTRINSIC DISTRIBUTION: MEDITERRANEAN SEA; NORTH ATLANTIC OCEAN; NORTH PACIFIC OCEAN.

PARALICELLA SIMILIS BIRSTEIN AND VINOGRADOV

PARALICELLA SIMILIS BIRSTEIN AND VINOGRADOV, 1960:180, FIG. 6.
PARALICELLA SIMILIS. BIRSTEIN AND VINOGRADOV, 1962A:36, FIG. 2.

DISTRIBUTION: SOUTHERN OCEAN: PACIFIC SECTOR, 63 18 S 135 14 E, 0-3600 M (B&V).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

PARALYSIANOPSIS ODHNERI SCHELLENBERG

PARALYSIANOPSIS ODHNERI SCHELLENBERG, 1931:7, FIG. 2.
AUSTRONISIMUS RHINOCEROS K.H.BARNARD, 1931A:425.
PARALYSIANOPSIS ODHNERI. K.H.BARNARD, 1932:38, FIG. 6.
PARALYSIANOPSIS ODHNERI. NICHOLLS, 1938:11.
PARALYSIANOPSIS ODHNERI. J.L.BARNARD, 1958B:97.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45 M (GEN).
FALKLAND ISLANDS: PORT WILLIAM, 22 M; PORT STANLEY, 2 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 30 M (AS); UNDINE HARBOUR, 18-27 M (KHB).

DEPTH RANGE: 2-45 M.

PARAMBASIA ANOMALA (NICHOLLS)

LYSIANASSA ANOMALA NICHOLLS, 1938:17, FIG. 5.
LYSIANASSA ANOMALA. J.L.BARNARD, 1958B:94.
PARAMBASIA ANOMALA. J.L.BARNARD, 1969A:295, (PROVISIONAL STATUS).

DISTRIBUTION: MACQUARIE ISLAND: (GEN).

PARAMBASIA ROSSII STEPHENSEN

PARAMBASIA (?) ROSSII STEPHENSEN, 1927:303, FIGS. 3,4.
PARAMBASIA (?) ROSSI. STEPHENSEN, 1938:244.
PARAMBASIA ROSSII. J.L.BARNARD, 1958B:97.
PARAMBASIA (?) ROSSI. J.L.BARNARD, 1972C:140.

DISTRIBUTION: AUCKLAND ISLANDS: PORT ROSS, 18 M (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, 42 M (KS).

DEPTH RANGE: 18-42 M.

PARAMBASIA SPECIES

PARAMBASIA ? SP. BELLAN-SANTINI AND LEDOYER, 1974:686, PL. 28.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, BENIGUET REEF, 35 M, PORT JEANNE-D'ARC, 14-17 M (BS&L).

DEPTH RANGE: 14-35 M.

PARAWALDECKIA KIDDERI (SMITH)

LYSIANASSA KIDDERI SMITH, 1876:59.
LYSIANASSA KIDDERI. MIERS, 1879:207.
NANNONYX KIDDERI. STEBBING, 1906:36.
NANNONYX KIDDERI. CHILTON, 1911B:563.
PARAWALDECKIA KIDDERI. TATTERSALL, 1922:3, PL. 1, FIGS. 1-6.

NANNONYX KIDDERI. MONOD, 1926:51, FIG. 50.
PARAWALDECKIA KIDDERI. SCHELLENBERG, 1931:6.
PARAWALDECKIA KIDDERI. PIRLOT, 1936:255.
PARAWALDECKIA KIDDERI. STEPHENSEN, 1947:33.
PARAWALDECKIA KIDDERI. STEPHENSEN, 1949:5.
PARAWALDECKIA KIDDERI. J.L.BARNARD, 1958B:98.
PARAWALDECKIA KIDDERI. K.H.BARNARD, 1965:205.
PARAWALDECKIA KIDDERI. J.L.BARNARD, 1969A:302.
PARAWALDECKIA KIDDERI. BELLAN-SANTINI AND LEDOYER, 1974:686, PL. 29.
NOT NANNONYX KIDDERI. CHILTON, 1909A:615, (=PARAWALDECKIA SPECIES).
NOT NANNONYX KIDDERI. THOMSON, 1913:242, (=PARAWALDECKIA THOMSONI).
NOT NANNONYX KIDDERI. CHILTON, 1921B:41, FIGS. 3A,B, (=PARAWALDECKIA STEBBINGI).
NOT PARAWALDECKIA KIDDERI. STEPHENSEN, 1927:300, FIG. 2, (=PARAWALDECKIA SPECIES).
NOT PARAWALDECKIA KIDDERI. STEPHENSEN, 1938:244, (=PARAWALDECKIA SPECIES).
NOT NANNONYX KIDDERI. HURLEY AND COOPER, 1974:565, (=PARAWALDECKIA SPECIES).
NOT PARAWALDECKIA KIDDERI. HURLEY AND COOPER, 1974:565, (=PARAWALDECKIA SPECIES).

DISTRIBUTION: CROZET ISLANDS: 1-5 M (KS); EAST ISLAND, ADVENTURE BAY (BS&L).
FALKLAND ISLANDS: PORT STANLEY, LOW TIDE (AS).
KERGUELEN ISLANDS: ROCKS (SIS); (EJM); MORBIHAN BAY, LOW TIDE, PORT DOUZIEME, LITTORAL; PORT AUX FRANCAIS, LOW TIDE (BS&L).
MAGELLANIC AREA: PUNTA ARENAS, LOW TIDE; 'KATANUSHUAIA', 18-22 M; HARRIS BAY, LOW TIDE; USHUAIA BAY, 2-4 M (AS); SANTA ANA POINT (TM).

DEPTH RANGE: LOW TIDE-22 M.

EXTRINSIC DISTRIBUTION: GOUGH ISLAND; KERMADEC ISLANDS.

PARAWALDECKIA SPECIES

PARAWALDECKIA SPP. J.L.BARNARD, 1972C:140.
LYSIANASSA SP. WALKER, 1908:33.
NANNONYX KIDDERI. CHILTON, 1909A:615.
PARAWALDECKIA KIDDERI. STEPHENSEN, 1927:300, FIG. 2.
PARAWALDECKIA KIDDERI. STEPHENSEN, 1938:244.
NANNONYX KIDDERI. HURLEY AND COOPER, 1974:565.
PARAWALDECKIA KIDDERI. HURLEY AND COOPER, 1974:565.

DISTRIBUTION: AUCKLAND ISLANDS: (AOW); CARNLEY HARBOUR (CC), MASKED ISLAND, ROCKS; PORT ROSS, LOW TIDE-18 M (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR (CC), SHORE (KS).

EXTRINSIC DISTRIBUTION: SNARES ISLANDS.

PODOPRIONIDES INCERTA WALKER

PODOPRIONIDES INCERTA WALKER, 1906A:457.
PODOPRIONIDES INCERTA. WALKER, 1907:17, PL. 5, FIG. 8.
PODOPRIONIDES INCERTA. SCHELLENBERG, 1926A:242, FIG. 3.
PODOPRIONIDES INCERTA. K.H.BARNARD, 1930:321.
PODOPRIONIDES INCERTA. J.L.BARNARD, 1958B:98.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: WINTER QUARTERS BAY (AOW), (KHB).

PSEUDAMBASIA BIPARTITA STEPHENSEN

PSEUDAMBASIA BIPARTITA STEPHENSEN, 1927:305, FIG. 5.
PSEUDAMBASIA BIPARTITA. J.L.BARNARD, 1958B:98.
PSEUDAMBASIA BIPARTITA. J.L.BARNARD, 1972C:140.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND, ROCKY COAST (KS).

PSEUDOKOROGA BARNARDI SCHELLENBERG

PSEUDOKOROGA BARNARDI SCHELLENBERG, 1931:16, FIG. 7.
PSEUDOKOROGA BARNARDI. J.L.BARNARD, 1958B:98.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M (AS).

PSEUDONESIMOIDES CORNUTILABRIS BELLAN-SANTINI AND LEDOYER

PSEUDONESIMOIDES CORNUTILABRIS BELLAN-SANTINI AND LEDOYER, 1974:690, PLS. 30,31.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, JOLIETTE COVE, 10-54 M, AUSTRALIA ISLAND, 24 M (BS&L).

DEPTH RANGE: 10-54 M.

PSEUDORCHOMENE COATSI (CHILTON)

ORCHOMENOPSIS (?) COATSI CHILTON, 1912:477, PL. 1, FIGS. 8,9.
PSEUDORCHOMENE COATSI. SCHELLENBERG, 1926A:295.
PSEUDORCHOMENE COATSI. K.H.BARNARD, 1932:74.
PSEUDORCHOMENE COATSI. NICHOLLS, 1938:39, FIG. 20.
PSEUDORCHOMENE COATSI. J.L.BARNARD, 1958B:98.

DISTRIBUTION: COATS LAND: 71 01 S 22 W, 290 M (CC).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
MACQUARIE ISLAND: LOW TIDE-121 M (GEN).
QUEEN MARY COAST: SHACKLETON GLACIER, 66 18 S 54 58 E, 486 M (GEN).
SOUTH GEORGIA: OFF BARFF POINT, 150-240 M; CUMBERLAND BAY, 120-204 M; OFF 'JASON LIGHT', 238-270 M; CUMBERLAND EAST BAY, 88-273 M; JASON HARBOUR, 60-160 M (KHB).

DEPTH RANGE: LOW TIDE-486 M.

SCOPELOCHEIROPSIS ABYSSALIS SCHELLENBERG

SCOPELOCHEIROPSIS ABYSSALIS SCHELLENBERG, 1926A:260, FIG. 12.
SCOPELOCHEIROPSIS ABYSSALIS. J.L.BARNARD, 1958B:99.
SCOPELOCHEIROPSIS ABYSSALIS. BIRSTEIN AND VINOGRADOV, 1962A:34, FIG. 1.

DISTRIBUTION: SOUTHERN OCEAN: PACIFIC SECTOR, 64 03 S 161 59 E, 0-3000 M (B&V).

EXTRINSIC DISTRIBUTION: NORTH ATLANTIC OCEAN.

SHACKLETONIA ROBUSTA K.H.BARNARD

SHACKLETONIA ROBUSTA K.H.BARNARD, 1931A:425.
SHACKLETONIA ROBUSTA. K.H.BARNARD, 1932:29, FIG. 3.
SHACKLETONIA ROBUSTA. J.L.BARNARD, 1958B:99.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 230-250 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 230-342 M.

SOCARNOIDES KERGUELENI STEBBING

SOCARNOIDES KERGUELENI STEBBING, 1888:691, PL. 25.
SOCARNOIDES KERGUELENI. STEBBING, 1906:47.
ACIDOSTOMELLA CULTRIFERA SCHELLENBERG, 1926B:197, FIGS. 1A-I.
SOCARNOIDES KERGUELENI. SHELLENBERG, 1931:22.
ACIDOSTOMELLA CULTRIFERA. K.H.BARNARD, 1932:32.
SOCARNOIDES KERGUELENI. J.L.BARNARD, 1958B:99.

DISTRIBUTION: KERGUELEN ISLANDS: GAZELLE HARBOUR, 5-10 M (AS); GREENLAND HARBOUR, 54 M; CUMBERLAND BAY, 229 M (TRRS).
SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS); 53 43 S 40 57 W, 177 M (KHB).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M; OFF GRYTVIKEN, 22-30 M (AS); CUMBERLAND EAST BAY, 179-235 M; 53 55 S 38 01 W, 107 M; 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 5-235 M.

SOPHROSYNE MURRAYI STEBBING

SOPHROSYNE MURRAYI STEBBING, 1888:652, PL. 15.
SOPHROSYNE MURRAYI. DELLA VALLE, 1893:795, PL. 60, FIG. 38.

SOPHROSYNE MURRAYI. STEBBING, 1906:21.
SOPHROSYNE MURRAYI. J.L.BARNARD, 1958B:99.

DISTRIBUTION: KERGUELEN ISLANDS: CHRISTMAS HARBOUR (TRRS).

STENIA MAGELLANICA DANA

STENIA MAGELLANICA DANA, 1852:209.
ANONYX MAGELLANICUS. STEBBING, 1888:266.
ANONYX FUEGIENSIS. DANA, 1853-55:919, PL. 62, FIG. 4.
ANONYX FUEGIENSIS. DELLA VALLE, 1893:836.
STENIA MAGELLANICA. STEBBING, 1906:88, (DUBIOUS GENUS AND SPECIES).
STENIA MAGELLANICA. J.L.BARNARD, 1958B:103, (DUBIOUS GENUS AND SPECIES).

DISTRIBUTION: MAGELLANIC AREA: GOOD SUCCESS BAY, 2-3 M (JDD).

STEPHENSENIA HAEMATOPUS SCHELLENBERG

STEPHENSENIA HAEMATOPUS SCHELLENBERG, 1928A:285, FIG. 2.
STEPHENSENIA HAEMATOPUS. SCHELLENBERG, 1931:12, FIGS. 4-6.
STEPHENSENIA HAEMATOPUS. J.L.BARNARD, 1958B:99.

DISTRIBUTION: MAGELLANIC AREA: PARAMO (AS).

STOMACONTION INSIGNE K.H.BARNARD

STOMACONTION INSIGNE K.H.BARNARD, 1932:33, FIG. 4.
STOMACONTION INSIGNE. J.L.BARNARD, 1958B:99.

DISTRIBUTION: SHAG ROCKS: 53 43 S 40 57 W, 177 M (KHB).

STOMACONTION KERGUELENI (STEBBING)

ACONTIOSTOMA KERGUELENI STEBBING, 1888:720, PL. 33.
STOMACONTION PEPINII. STEBBING, 1906:16, (IN PART).
STOMACONTION KERGUELENI. SCHELLENBERG, 1931:6.
STOMACONTION KERGUELENI. J.L.BARNARD, 1958B:99.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M (AS).
KERGUELEN ISLANDS: ROYAL SOUND, 50 M (TRRS).
MAGELLANIC AREA: BORJA BAY, 18 M; MAGELLAN SOUND, 5-7 M (AS).

DEPTH RANGE: 5-50 M.

STOMACONTION PEPINII (STEBBING)

ACONTIOSTOMA PEPINII STEBBING, 1888:716, PL. 32.
STOMACONTION PEPINII. STEBBING, 1899D:206.
STOMACONTION PEPINII. STEBBING, 1906:16, (IN PART, PART =STOMACONTION KERGUELENI).
STOMACONTION PEPINII. SCHELLENBERG, 1931:5, FIG. 1.
STOMACONTION PEPINEI. STEPHENSEN, 1947:33.
STOMACONTION PEPINII. J.L.BARNARD, 1958B:99.
STOMACONTION PEPINII. BELLAN-SANTINI AND LEDOYER, 1974:690.
NOT STOMACONTION PEPINII. K.H.BARNARD, 1937:140, (=STOMACONTION CAPENSE, ACCORDING TO K.H.BARNARD, 1940).

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M; BERKELEY SOUND, 16 M; PORT WILLIAM, 40 M; 53 45 S 61 10 W, 140-150 M (AS).
KERGUELEN ISLANDS: (KS); ROYAL SOUND, 50 M (TRRS); MORBIHAN BAY, 30-108 M, PORT JEANNE-D'ARC, 14-17 M, JOLIETTE COVE, 10-54 M, CHAT ISLAND, AUSTRALIA ISLAND, 24 M (BS&L).
MAGELLANIC AREA: BORJA BAY, 18 M; PUERTO CONDOR, 90 M (AS).

DEPTH RANGE: 10-150 M.

'TRYPHOSA' CARINATA SCHELLENBERG

TRYPHOSA CARINATA SCHELLENBERG, 1926A:271, FIG. 18.
TRYPHOSA KERGUELENI. WALKER, 1907:16, (IN PART).
TRYPHOSA CARINATA. SCHELLENBERG, 1931:36.
TMETONYX CARINATA. K.H.BARNARD, 1932:55.

TMETONYX CARINATA. J.L.BARNARD, 1958B:100.
TRYPHOSA CARINATA. J.L.BARNARD, 1962D:29.
'TRYPHOSA' CARINATA. J.L.BARNARD, 1969A:304, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: CAPE WADWORTH, 14-27 M; WINTER QUARTERS BAY (AOW).
SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M (AS).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 14-385 M.

TRYPHOSELLA ANALOGICA (K.H.BARNARD)

TRYPHOSA ANALOGICA K.H.BARNARD, 1932:52, FIG. 17.
TRYPHOSA ANALOGICA. J.L.BARNARD, 1958B:100.
TRYPHOSA ANALOGICA. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA ANALOGICA. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: SOUTH GEORGIA: STROMNESS HARBOUR, 155-178 M; UNDINE HARBOUR, 18-27 M; 53 51 S 36 21 W, 200-236 M; 53 52 S 36 08 W, 160 M (KHB).

DEPTH RANGE: 18-236 M.

TRYPHOSELLA BISPINOSA (SCHELLENBERG)

TRYPHOSA BISPINOSA SCHELLENBERG, 1931:32, FIG. 14.
TRYPHOSA BISPINOSA. RUFFO, 1949:8.
TRYPHOSA BISPINOSA. J.L.BARNARD, 1958B:101.
TRYPHOSA BISPINOSA. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA BISPINOSA. J.L.BARNARD, 1969A:365, (BY IMPLICATION).
TRYPHOSELLA BISPINOSA. BELLAN-SANTINI, 1972A:217.

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 45-80 M (DBS).
BELLINGSHAUSEN SEA: 71 19 S 87 37 W; 70 23 S 82 47 W (SR).
FALKLAND ISLANDS: BERKELEY SOUND, 16 M (AS).
SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 12-30 M; CUMBERLAND BAY, 250-310 M (AS).

DEPTH RANGE: 12-310 M.

TRYPHOSELLA CASTELLATA (K.H.BARNARD)

TRYPHOSA CASTELLATA K.H.BARNARD, 1932:53, FIG. 18.
TRYPHOSA CASTELLATA. J.L. BARNARD, 1958B:101.
TRYPHOSA CASTELLATA. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA CASTELLATA. J.L.BARNARD, 1969A:365, (BY IMPLICATION).
TRYPHOSELLA CASTELLATA. SANDERSON, 1973:38.

DISTRIBUTION: MAGELLANIC AREA: HERMITE ISLAND, 30-35 M (KHB).

TRYPHOSELLA CICADOPSIS (SCHELLENBERG)

TMETONYX CICADOPSIS SCHELLENBERG, 1926A:278, FIG. 22.
TMETONYX CICADOPSIS. J.L.BARNARD, 1958B:100.
TRYPHOSA CICADOPSIS. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA CICADOPSIS. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

TRYPHOSELLA INTERMEDIA (SCHELLENBERG)

TRYPHOSA INTERMEDIA SCHELLENBERG, 1926A:269, FIG. 17.
TRYPHOSA INTERMEDIA. J.L.BARNARD, 1958B:101.
TRYPHOSA INTERMEDIA. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA INTERMEDIA. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

TRYPHOSELLA LONGITELSON (K.H.BARNARD)

TMETONYX LONGITELSON K.H.BARNARD, 1932:54, FIG. 20.
TMETONYX LONGITELSON. RUFFO, 1949:8.

TMETONYX LONGITELSON. J.L.BARNARD, 1958B:100.
TRYPHOSA LONGITELSON. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA LONGITELSON. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: BELLINGSHAUSEN SEA: 71 18 S 88 02 W (SR).
SOUTH GEORGIA: 53 52 S 36 08 W, 160 M (KHB).

TRYPHOSELLA MACROPAREIA (SCHELLENBERG)

TRYPHOSA MACROPAREIA SCHELLENBERG, 1926A:274, FIG. 19.
TRYPHOSA MACROPAREIA. DAHL, 1954:281.
TRYPHOSA MACROPAREIA. J.L.BARNARD, 1958B:101.
TRYPHOSA MACROPAREIA. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA MACROPAREIA. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: 'DISCOVERY INLET', 550 M (ED).

DEPTH RANGE: 385-550 M.

TRYPHOSELLA MARRI THURSTON

TRYPOSELLA MARRI THURSTON, 1974B:61, FIGS. 22,23.
TRYPHOSELLA CF. TRIANGULARIS. THURSTON, 1974A:19, FIGS. 7V-X.

DISTRIBUTION: SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 2 M (MHT).
TRINITY PENINSULA: HOPE BAY, 37-55 M, JAGGED ROCKS, LOW TIDE (MHT).

DEPTH RANGE: LOW TIDE-55 M.

TRYPHOSELLA PARAMOI (SCHELLENBERG)

TMETONYX PARAMOI SCHELLENBERG, 1931:41, FIGS. 20,21.
TMETONYX PARAMOI. J.L.BARNARD, 1958B:100.
TRYPHOSA PARAMOI. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA PARAMOI. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: MAGELLANIC AREA: PARAMO (AS).

TRYPHOSELLA SCHELLENBERGI NEW NAME

TMETONYX SERRATUS SCHELLENBERG, 1931:40, FIG. 19.
TMETONYX SERRATUS. SCHELLENBERG, 1935:232.
TMETONYX SERRATUS. RUFFO, 1947:327.
TMETONYX SERRATUS. J.L.BARNARD, 1958B:100.
TRYPHOSA SERRATA. J.L.BARNARD, 1962D:29,30, (KEY), (JUNIOR HOMONYM).
TMETONYX SERRATUS. J.L.BARNARD, 1967B:42.
TRYPHOSELLA SERRATA. J.L.BARNARD, 1969A:365, (JUNIOR HOMONYM, BY IMPLICATION).

DISTRIBUTION: FALKLAND ISLANDS: PORT WILLIAM, 12 M; PORT STANLEY (AS).
MAGELLANIC AREA: MAGELLAN SOUND; SMYTH CHANNEL, 0-45 M; GENTE GRANDE BAY, 4-5 M; BAHIA INUTIL, 36-54 M; USHUAIA BAY, 9-22 M (AS); 'PENGUIN ROOKERY', STATEN ISLAND (SR).

DEPTH RANGE: 0-54 M.

EXTRINSIC DISTRIBUTION: CHILE.

TRYPHOSELLA SERRATA (SCHELLENBERG)

TRYPHOSA SERRATA SCHELLENBERG, 1931:34, FIGS. 15,16.
TRYPHOSA SERRATA. J.L.BARNARD, 1958B:101.
TRYPHOSA SERRATA. J.L.BARNARD, 1962D:29,30, (KEY), (SENIOR HOMONYM).
TRYPHOSELLA SERRATA. J.L.BARNARD, 1969A:365, (SENIOR HOMONYM, BY IMPLICATION).

DISTRIBUTION: MAGELLANIC AREA: HARRIS BAY, 27 M; BAHIA INUTIL, 36-54 M; PUERTO EUGENIA, 18-27 M; NUEVA ISLAND; NAVARINO ISLAND, 54 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 22-50 M (AS).

DEPTH RANGE: 18-54 M.

EXTRINSIC DISTRIBUTION: ARGENTINA.

TRYPHOSELLA TRIANGULARIS (K.H.BARNARD)

TRYPHOSA TRIANGULARIS K.H.BARNARD, 1932:51, FIG. 16.
TRYPHOSA TRIANGULARIS. J.L.BARNARD, 1958B:101.
TRYPHOSA TRIANGULARIS. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA TRIANGULARIS. J.L.BARNARD, 1969A:365, (BY IMPLICATION).
TRYPHOSELLA TRIANGULARIS. THURSTON, 1974B:61, FIG. 24.
NOT TRYPHOSELLA CF. TRIANGULARIS. THURSTON, 1974A:19, FIGS. 7V-X, (=TRYPHOSELLA MARRI).

DISTRIBUTION: SOUTH GEORGIA: STROMNESS HARBOUR, 26-178 M; CUMBERLAND EAST BAY, 17-27 M; UNDINE HARBOUR, 18-27 M; 53 52 S 36 08 W, 160 M (KHB).

DEPTH RANGE: 17-178 M.

TRYPHOSELLA TRIGONICA (STEBBING)

HIPPOMEDON TRIGONICUS STEBBING, 1888:630, PL. 9.
TRYPHOSA TRIGONICA. STEBBING, 1906:70.
TRYPHOSA TRIGONICA. SCHELLENBERG, 1926B:195.
TRYPHOSA TRIGONICA. J.L.BARNARD, 1958B:101.
TRYPHOSA TRIGONICA. J.L.BARNARD, 1962D:30, (KEY).
TRYPHOSELLA TRIGONICA. J.L.BARNARD, 1969A:365, (BY IMPLICATION).

DISTRIBUTION: KERGUELEN ISLANDS: (TRRS), (AS).

TRYPHOSITES CAPADAREI HURLEY

TRYPHOSITES CAPADAREI HURLEY, 1965B:177, FIGS. 14,15.
HOPLONYX STEBBINGI WALKER, 1903A:52, PL. 9, FIGS. 52-57*, (IN PART, PART =URISTES STEBBINGI).
TRYPHOSITES STEBBINGI. CHILTON, 1912:469.

DISTRIBUTION: COATS LAND: 74 01 S 22 W, 290 M (CC).
ROSS SEA: CAPE ADARE, 43 M (AOW).

DEPTH RANGE: 43-290 M.

TRYPHOSITES CHEVREUXI STEBBING

TRYPHOSITES CHEVREUXI STEBBING, 1914:355, PL. 3.
TRYPHOSITES CHEVREUXI. SCHELLENBERG, 1931:36, FIG. 17.
TRYPHOSITES CHEVREUXI. K.H.BARNARD, 1932:54, FIG. 19.
TRYPHOSITES CHEVREUXI. SCHELLENBERG, 1935:232.
TRYPHOSITES CHEVREUXI. J.L.BARNARD, 1958B:102.

DISTRIBUTION: FALKLAND ISLANDS: ROY COVE, 14 M; WHALES BAY (TRRS); PORT ALBEMARLE, 40 M; PORT WILLIAM, 17 M; PORT LOUIS, 7-8 M, CARENAGE CREEK, 1 M; PORT STANLEY, 2-9 M (AS); EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M, OFF CAPE PEMBROKE, 82 M; 51 58 S 65 01 W, 143-145 M (KHB).
MAGELLANIC AREA: BORJA BAY, 18 M; FORTESCUE BAY, 18-22 M; FITZROY CHANNEL, 13-14 M; CAPE VALENTINA, 270 M; GENTE GRANDE BAY, 4-5 M; PUNTA ARENAS, 13-14 M; MAGELLAN SOUND; SMYTH CHANNEL, 14-45 M; ELIZABETH ISLAND; PUERTO HOPE, 11-18 M; ALMIRANTAZGO SOUND, 36 M; PUERTO DEL HAMBRE; PUERTO CONDOR, 90 M; HARRIS BAY; BAHIA INUTIL, 36-54 M; USHUAIA BAY, 2-27 M; PUERTO EUGENIA, 18-27 M; NAVARINO ISLAND, 18 M; NUEVA ISLAND, 54 M; LENNOX COVE, 18-36 M; ULTIMA ESPERANZA, 13-18 M (AS); HERMITE ISLAND, 30-35 M (KHB).

DEPTH RANGE: 1-270 M.

EXTRINSIC DISTRIBUTION: CHILE; SOUTH ATLANTIC OCEAN.

TRYPHOSOIDES FALCATA SCHELLENBERG

TRYPHOSOIDES FALCATA SCHELLENBERG, 1931:38, FIG. 18.
TRYPHOSOIDES FALCATA. J.L.BARNARD, 1958B:102.
URISTES FALCATUS. J.L.BARNARD, 1962D:35.
URISTES FALCATUS. J.L.BARNARD, 1963:459,460, (KEY).
TRYPHOSOIDES FALCATA. J.L.BARNARD, 1969A:367.

DISTRIBUTION: MAGELLANIC AREA: PARAMO (AS).

URISTES ADAREI (WALKER)

TRYPHOSA ADAREI WALKER, 1903A:49, PL. 8, FIGS. 38-44.
TRYPHOSA ADAREI. STEBBING, 1906:720.
TRYPHOSA MURRAYI. WALKER, 1907:16, (IN PART).
TRYPHOSA MURRAYI. SCHELLENBERG, 1926A:267, FIG. 16.
TRYPHOSA ADAREI. K.H.BARNARD, 1930:326,448.
TRYPHOSA ADAREI. K.H.BARNARD, 1932:51, FIG. 15.
TRYPHOSA ADAREI. NICHOLLS, 1938:26, FIG. 11.
TRYPHOSA ? ADAREI. STEPHENSEN, 1947:35.
TRYPHOSA ADAREI. J.L.BARNARD, 1958B:100.
TRYPHOSELLA ADAREI. J.L.BARNARD, 1962D:29.
URISTES ADAREI. HURLEY, 1965B:169, FIGS. 9,10.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 5-540 M (GEN).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 644 M (GEN); 'GAUSS STATION', 385 M; GAUSSBERG, 177 M (AS).
ROSS SEA: 289 M; CAPE ROYDS, 110-146 M; CAPE ADARE, 82-92 M (KHB), 47 M (AOW); WINTER QUARTERS BAY (AOW).
SOUTH SHETLAND ISLANDS: BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 5-750 M.

URISTES ALBINUS (K.H.BARNARD)

TRYPHOSELLA ALBINA K.H.BARNARD, 1932:48, FIG. 12.
TRYPHOSA ? ALBINA. STEPHENSEN, 1947:35.
TRYPHOSELLA ALBINA. J.L.BARNARD, 1958B:101.
URISTES ALBINUS. J.L.BARNARD, 1962D:35.
URISTES ALBINA. J.L.BARNARD, 1963:459,460, (KEY).

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB); BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 342-750 M.

URISTES BARBATIPES (STEBBING)

TRYPHOSA BARBATIPES STEBBING, 1888:621, PL. 7.
ANONYX BARBATIPES. DELLA VALLE, 1893:814.
TRYPHOSELLA BARBATIPES. BONNIER, 1893:171,195.
ORCHOMENELLA BARBATIPES. SARS, 1895:66.
TRYPHOSELLA BARBATIPES. STEBBING, 1906:68, FIG. 11.
TRYPHOSELLA BARBATIPES. EALEY, 1954:205,206.
TRYPHOSELLA BARBATIPES. J.L.BARNARD, 1958B:102.
URISTES BARBATIPES. J.L.BARNARD, 1962D:35.
URISTES BARBATIPES. J.L.BARNARD, 1963:459,460, (KEY).

DISTRIBUTION: HEARD ISLAND: (EHME).
KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS).

URISTES GEORGIANUS (SCHELLENBERG)

TRYPHOSELLA GEORGIANA SCHELLENBERG, 1931:30, FIG. 13.
TRYPHOSELLA GEORGIANA. NICHOLLS, 1938:24, FIG. 9.
TRYPHOSELLA GEORGIANA. J.L.BARNARD, 1958B:102.
URISTES GEORGIANUS. J.L.BARNARD, 1962D:35.
URISTES GEORGIANA. J.L.BARNARD, 1963:459,460, (KEY).
URISTES GEORGIANUS. HURLEY, 1965B:176, FIG. 13.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS).

DEPTH RANGE: 75-540 M.

URISTES GIGAS DANA

URISTES GIGAS DANA, 1852:209.
URISTES GIGAS. DANA, 1853-55:917,1595, PL. 62, FIG. 3.
URISTES GIGAS. BATE, 1862:89, PL. 14, FIG. 8.
TRYPHOSA ANTENNIPOTENS STEBBING, 1888:617, PL. 6.
TRYPHOSELLA ANTENNIPOTENS. BONNIER, 1893:171.
ANONYX ANTENNIPOTENS. DELLA VALLE, 1893:827.
ANONYX GIGAS. DELLA VALLE, 1893:836.

PSEUDOTRYPHOSA ANTENNIPOTENS. SARS, 1895:83.
URISTES GIGAS. STEBBING, 1899D:211.
URISTES GIGAS. STEBBING, 1906:64.
URISTES GIGAS. WALKER, 1907:16.
URISTES GIGAS. K.H.BARNARD, 1932:47, FIG. 11.
URISTES GIGAS. NICHOLLS, 1938:22.
URISTES GIGAS. J.L.BARNARD, 1958B:102.
URISTES GIGAS. J.L.BARNARD, 1962D:35.
URISTES GIGAS. J.L.BARNARD, 1963:459,460, (KEY).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 198-624 M (GEN).
HEARD ISLAND: 52 04 S 71 22 E, 270 M (TRRS).
MAGELLANIC AREA: PARAMO (AS).
ROSS SEA: CAPE ADARE (AOW).
SOUTH GEORGIA: STROMNESS HARBOUR, 122-178 M; 53 51 S 36 21 W, 200-236 M; 53 52 S 36 08 W, 160 M; 53 42 S 37 12 W, 0-5 M; 53 29 S 37 13 W, 0-5 M (KHB).
SOUTHERN OCEAN: INDIAN SECTOR, 62 28 S 101 35 E (JDD).

DEPTH RANGE: 0-624 M.

URISTES MURRAYI (WALKER)

TRYPHOSA MURRAYI WALKER, 1903A:50 PL. 9, FIGS. 45-51.
TRYPHOSA MURRAYI. STEBBING, 1906:720.
TRYPHOSA MURRAYI. WALKER, 1907:16, (IN PART, PART =URISTES ADAREI).
TRYPHOSA MURRAYI. CHILTON, 1912:467.
TRYPHOSA MURRAYI. SCHELLENBERG, 1931:32.
TRYPHOSA MURRAYI. NICHOLLS, 1938:27.
TRYPHOSA MURRAYI. DAHL, 1954:281.
TRYPHOSA MURRAYI. J.L.BARNARD, 1958B:101.
TRYPHOSA MURRAYI. J.L.BARNARD, 1962D:29.
URISTES MURRAYI. HURLEY, 1965B:165, FIGS. 7,8.
URISTES MURRAYI. EMISON, 1968:202, FIG. 10, TABLES 10-12.
URISTES MURRAYI. BELLAN-SANTINI, 1972A:217, PLS. 29,30.
URISTES MURRAYI. BELLAN-SANTINI, 1972B:699.
NOT TRYPHOSA MURRAYI. SCHELLENBERG, 1926A:267, FIG. 16, (=URISTES ADAREI).

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 5-720 M (GEN); GEOLOGIE ARCHIPELAGO, 60-140 M (DBS).
COATS LAND: 74 01 S 22 W, 290 M (CC).
QUEEN MARY COAST: SHACKLETON GLACIER, 66 18 S 54 58 E, 486 M (GEN).
ROSS SEA: CAPE ADARE; WINTER QUARTERS BAY (AOW); 'DISCOVERY INLET', 550 M (ED); CAPE CROZIER (WBE).
WEDDELL SEA: 65 56 S 54 35 W, 920 M (AS).

DEPTH RANGE: 5-920 M.

URISTES SERRATUS SCHELLENBERG

URISTES SERRATUS SCHELLENBERG, 1931:26, FIG. 11.
URISTES SERRATUS. J.L.BARNARD, 1958B:102.
URISTES SERRATUS. J.L.BARNARD, 1962D:35.
URISTES SERRATUS. J.L.BARNARD, 1963:459,460, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, CARENAGE CREEK, 1 M (AS).
MAGELLANIC AREA: PUERTO HOPE, 11-18 M (AS).

DEPTH RANGE: 1-18 M.

URISTES STEBBINGI (WALKER)

HOPLONYX STEBBINGI WALKER, 1903A:52, PL. 9, FIGS. 52-57*, (IN PART, PART =TRYPHOSITES CAPADAREI).
TMETONYX STEBBINGI. STEBBING, 1906:720.
TMETONYX STEBBINGI. CHILTON, 1909A:618.
TRYPHOSITES STEBBINGI. J.L.BARNARD, 1958B:102.
URISTES STEBBINGI. HURLEY, 1965B:173, FIGS. 11,12.
NOT TRYPHOSITES STEBBINGI. CHILTON, 1912:469, (=TRYPHOSITES CAPADAREI).

DISTRIBUTION: AUCKLAND ISLANDS: MUSGRAVE HARBOUR (CC).
ROSS SEA: CAPE ADARE, 43 M (AOW).

URISTES SUBCHELATUS (SCHELLENBERG)

URISTOIDES SUBCHELATUS SCHELLENBERG, 1931:28, FIG. 12.
URISTOIDES SUBCHELATUS. J.L.BARNARD, 1958B:102.
URISTES SUBCHELATUS, J.L.BARNARD, 1962D:35.
URISTES SUBCHELATUS. J.L.BARNARD, 1963:459,460, (KEY).

DISTRIBUTION: MAGELLANIC AREA: BAHIA INUTIL, 36-54 M; HARRIS BAY, 18 M (AS).

DEPTH RANGE: 18-54 M.

URISTES TYPHLOPS MEDIATOR J.L.BARNARD

URISTES TYPHLOPS MEDIATOR J.L.BARNARD, 1962D:36, FIG. 23, TABLES 6,7B,11.

DISTRIBUTION: VALDIVIA BASIN: 56 43 S 27 41 W, 2747 M (JLB).

EXTRINSIC DISTRIBUTION: ANGOLA BASIN; CAPE BASIN.

VALETTIA COHERES STEBBING

VALETTIA COHERES STEBBING, 1888:724, PL. 34.
VALETTIA COHERES. STEBBING, 1906:22.
VALETTIA COHERES. SCHELLENBERG, 1955:191.
VALETTIA COHERES. J.L.BARNARD, 1958B:102.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR; 62 26 S 95 44 E, 3612 M (TRRS).

WALDECKIA CHEVREUXI STEBBING

WALDECKIA CHEVREUXI STEBBING, 1910A:572, PL. 47B.
WALDECKIA CHEVREUXI. CHILTON, 1912:473.
WALDECKIA CHEVREUXI. CHILTON, 1921B:40, FIG. 2.
WALDECKIA CHEVREUXI. CHILTON, 1922:4.
WALDECKIA CHEVREUXI. J.L.BARNARD, 1958B:102.
WALDECKIA CHEVREUXI. J.L.BARNARD, 1974A:144, (POSSIBLE JUNIOR SYNONYM OF WALDECKIA NITENS).
WALDECKIA CHEVREUXI. BELLAN-SANTINI AND LEDOYER, 1974:690, PL. 32.

DISTRIBUTION: KERGUELEN ISLANDS: PORT AUX FRANCAIS (BS&L).

EXTRINSIC DISTRIBUTION: AUSTRALIA; NEW ZEALAND.

WALDECKIA OBESA (CHEVREUX)

CHARCOTIA OBESA CHEVREUX, 1905D:163, FIG. 3.
WALDECKIA OBESA. CHEVREUX, 1906E:15, FIGS. 8-10.
CHARCOTIA OBESA. STEBBING, 1906:718.
CHARCOTIA OBESA. WALKER, 1906A:454.
WALDECKIA OBESA. WALKER, 1907:10, PL. 2, FIG. 4.
WALDECKIA OBESA. CHEVREUX, 1911C:403.
WALDECKIA ZSCHAUII. CHILTON, 1912:471.
WALDEKIA OBESA. CHEVREUX, 1913:91.
WALDECKIA ZSCHAUI. CHILTON, 1913:56.
WALDECKIA OBESA. SCHELLENBERG, 1926A:253, FIG. 9.
WALDECKIA OBESA. K.H.BARNARD, 1930:323, FIG. 1A.
WALDECKIA OBESA. K.H.BARNARD, 1932:43.
WALDECKIA OBESA. NICHOLLS, 1938:16, FIG. 4.
WALDECKIA OBESA. STEPHENSEN, 1947:33.
WALDECKIA OBESA. DAHL, 1954:281.
WALDECKIA OBESA. J.L.BARNARD, 1958B:102.
WALDECKIA OBESA. BELLISIO, 1966:52, FIG. 27.
WALDECKIA OBESA. ARNAUD, 1970:261.
WALDECKIA OBESA. BELLAN-SANTINI, 1972A:218.
WALDECKIA OBESA. THURSTON, 1974B:64, FIG. 25.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN); GEOLOGIE ARCHIPELAGO, 15-140 M; CAPE GEODESIE, 66 40 S 139 51 E, 115-240 M (DBS).
COATS LAND: 74 01 S 22 W, 290 M (CC).
DAVIS SEA: 198-432 M (GEN); 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: 200 M (EC).
PALMER ARCHIPELAGO: ANVERS ISLAND, BISCOE BAY, 64 50 S, 110 M; PELTIER CHANNEL, 92 M (EC); ANVERS ISLAND, FOURNIER BAY, 36 M; PORT LOCKROY, 7 M (KHB), 90-120 M (KS), 37 M, GOUDIER ISLAND, LOW TIDE (MHT).

ROSS SEA: WINTER QUARTERS BAY (AOW); MCMURDO SOUND, 256-457 M (KHB); 'DISCOVERY INLET', 550 M (ED).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; DECEPTION ISLAND, 62 59 S 60 28 W, 525 M; KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).
WILHELM ARCHIPELAGO: BOOTH ISLAND (EC).

DEPTH RANGE: LOW TIDE-550 M.

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MELPHIDIPPIDAE

MELPHIDIPPA ANTARCTICA SCHELLENBERG

MELPHIDIPPA ANTARCTICA SCHELLENBERG, 1926A:347.
MELPHIDIPPA MACRURA. WALKER, 1907:34.
MELPHIDIPPA ANTARCTICA. K.H.BARNARD, 1930:383.
MELPHIDIPPA ANTARCTICA. SCHELLENBERG, 1931:170, FIG. 89.
MELPHIDIPPA ANTARCTICA. K.H.BARNARD, 1932:188.
MELPHIDIPPA ANTARCTICA. STEPHENSEN, 1947:56.
MELPHIDIPPA ANTARCTICA. J.L.BARNARD, 1958B:103.

DISTRIBUTION: BRANSFIELD STRAIT: 67 17 S 59 48 W, 200 M (KHB).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: WINTER QUARTERS BAY, 540 M (AOW); MCMURDO SOUND, 4-40 M (KHB).
SOUTH GEORGIA: MAIVIKEN, 75 M; MORAINE FJORD, 125 M (AS); CUMBERLAND BAY, 120-250 M; OFF 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 122-136 M; CAPE SAUNDERS, 132-148 M; CUMBERLAND EAST BAY, 200-234 M; 53 51 S 36 18 W, 245 M (KHB).
SOUTH SHETLAND ISLANDS: BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 4-750 M.

MELPHIDIPPA SERRATA (STEBBING)

NEOHELA SERRATA STEBBING, 1888:1215, PL. 136.
NEOHELA SERRATA. DELLA VALLE, 1893:343.
MELPHIDIPPA SERRATA. SARS, 1895:624.
MELPHIDIPPA SERRATA. STEBBING, 1899C:422.
MELPHIDIPPA SERRATA. STEBBING, 1906:337.
MELPHIDIPPA SERRATA. J.L.BARNARD, 1958B:103.

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS).

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OEDICEROTIDAE

BATHYPOREIAPUS MAGELLANICUS SCHELLENBERG

BATHYPOREIAPUS MAGELLANICUS SCHELLENBERG, 1931:155, FIG. 81.
BATHYPOREIAPUS ? N.SP. (PROPE MAGELLANICUM). RUFFO, 1956:119, FIG. 2.
BATHYPOREIAPUS MAGELLANICUS. J.L.BARNARD, 1958B:104.

DISTRIBUTION: MAGELLANIC AREA: PUNTA ARENAS, 4 M; ELIZABETH ISLAND; LENNOX ISLAND (AS).

EXTRINSIC DISTRIBUTION: ? BRAZIL.

CAROLOBATEA SCHNEIDERI (STEBBING)

HALIMEDON SCHNEIDERI STEBBING, 1888:839, PL. 59.
HALIMEDON BREVICALCAR. DELLA VALLE, 1893:539, (IN PART).
CAROLOBATEA SCHNEIDERI. STEBBING, 1899D:209.
CAROLOBATEA SCHNEIDERI. STEBBING, 1906:252.
CAROLOBATEA SCHNEIDERI. SCHELLENBERG, 1926B:195.
CAROLOBATEA SCHNEIDERI. J.L.BARNARD, 1958B:104.

DISTRIBUTION: KERGUELEN ISLANDS: (AS); BETSY COVE, SURFACE (TRRS).

CAROLOBATEA SPECIES

CAROLOBATEA SP. J.L.BARNARD, 1972C:143.
CAROLOBATEA NOVAE-ZEALANDIAE. CHILTON, 1909A:620, FIG. 2.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR (CC).

EXOEDICEROPSIS CHILTONI SCHELLENBERG

EXOEDICEROPSIS CHILTONI SCHELLENBERG, 1931:152, FIG. 80.
EXOEDICEROPSIS CHILTONI. J.L.BARNARD, 1958B:104.

DISTRIBUTION: SOUTHERN OCEAN: ATLANTIC SECTOR, 49 35 S 64 43 W, 112 M (AS).

HALICREION VANHOFFENI SCHELLENBERG

HALICREION VANHOFFENI SCHELLENBERG, 1926A:340, FIG. 48.
HALICREION VANHOFFENI. J.L.BARNARD, 1958B:104.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

METHALIMEDON NORDENSKJOLDI SCHELLENBERG

METHALIMEDON NORDENSKJOLDI SCHELLENBERG, 1931:150, FIG. 79.
METHALIMEDON NORDENSKJOLDI. K.H.BARNARD, 1932:141, FIG. 80.
METHALIMEDON NORDENSKJOLDI. NICHOLLS, 1938:91.
METHALIMEDON NORDENSKJOLDI. J.L.BARNARD, 1958B:104.
METHALIMEDON NORDENSKJOELDI. BELLAN-SANTINI, 1972A:221.
METHALIMEDON NORDENSKJOLDI. THURSTON, 1974A:32.
METHALIMEDON NORDENSKJOELDI. THURSTON, 1974B:65.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY (GEN); GEOLOGIE ARCHIPELAGO, 6 M (DBS).
PALMER ARCHIPELAGO: PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
SOUTH GEORGIA: OFF GRYTVIKEN, 12-50 M; CUMBERLAND BAY, 250-310 M (AS); CUMBERLAND WEST BAY, 110 M; STROMNESS HARBOUR, 122-136 M; 54 59 S 35 24 W, 130 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 10-15 M, PAAL HARBOUR, 5-25 M (MHT).

DEPTH RANGE: 5-310 M.

METOEDICEROS FUEGIENSIS SCHELLENBERG

METOEDICEROS FUEGIENSIS SCHELLENBERG, 1931:157, FIG. 82.
METOEDICEROS FUEGIENSIS. J.L.BARNARD, 1958B:104.
METOEDICEROS FUEGIENSIS. J.L.BARNARD, 1969A:480.
METOEDICEROS FUEGIENSIS. J.L.BARNARD, 1974B:144.

DISTRIBUTION: MAGELLANIC AREA: PUNTA ARENAS (AS).

MONOCULODES ANTARCTICUS K.H.BARNARD

MONOCULODES ANTARCTICUS K.H.BARNARD, 1932:136, FIG. 76.
MONOCULODES ANTARCTICUS. J.L.BARNARD, 1958B:105.
MONOCULODES ANTARCTICUS. J.L.BARNARD, 1962E:357,360, TABLE 1, (KEY).

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-500 M; NEUMAYER CHANNEL, 259 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, 244-344 M (KHB).

DEPTH RANGE: 160-500 M.

MONOCULODES SCABRICULOSUS K.H.BARNARD

MONOCULODES SCABRICULOSUS K.H.BARNARD, 1932:138, FIG. 77.
? MONOCULODES SCABRICULOSUS. STEPHENSEN, 1938:237.
MONOCULODES SCABRICULOSUS. J.L.BARNARD, 1958B:105.
MONOCULODES SCABRICULOSUS. J.L.BARNARD, 1962E:357,360, TABLE 1, (KEY).
MONOCULODES SCABRICULOSUS. J.L.BARNARD, 1967B:120.

MONOCULODES SCABRICULOSUS. BELLAN-SANTINI AND LEDOYER, 1974:690, PL. 33.
MONOCULODES SCABRICULOSUS. THURSTON, 1974A:33, FIGS. 10I-K.
MONOCULODES SCABRICULOSUS. THURSTON, 1974B:65.

DISTRIBUTION: KERGUELEN ISLANDS: PORT AUX FRANCAIS, 15 M; MORBIHAN BAY, JOLIETTE COVE, 10-54 M (BS&L).
MARGUERITE BAY: STONINGTON ISLAND, BACK BAY, 16 M (MHT).
SOUTH GEORGIA: STROMNESS HARBOUR, 122-136 M; WILSON HARBOUR, 26-83 M; CUMBERLAND EAST BAY, 22-110 M (KHB); CUMBERLAND WEST BAY, JASON HARBOUR, 20 M (KS).
SOUTH ORKNEY ISLANDS: NORMANNA STRAIT, 24-36 M (KHB); SIGNY ISLAND, BORGE BAY, 10-15 M, PAAL HARBOUR, 20-25 M (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, PORT FOSTER, 5-60 M (KHB).
TRINITY PENINSULA: HOPE BAY, GRUNDEN ROCK, LOW TIDE (MHT).

DEPTH RANGE: LOW TIDE-136 M.

MONOCULOPSIS VALLENTINI STEBBING

MONOCULOPSIS VALLENTINI STEBBING, 1914:360, PLS. 6,7.
MONOCULOPSIS VALLENTINI. SCHELLENBERG, 1931:148.
MONOCULODES VALLENTINI. K.H.BARNARD, 1932:139, FIG. 78.
MONOCULOPSIS VALLENTINI. J.L.BARNARD, 1958B:106.

DISTRIBUTION: FALKLAND ISLANDS: ROY COVE, LOW WATER (TRRS); EAST FALKLAND ISLAND, EDDYSTONE ROCK, 105-115 M (KHB).
MAGELLANIC AREA: 'PUERTO GALLEGOS', LOW TIDE; PUNTA ARENAS, LOW TIDE-4 M; USHUAIA BAY, 9 M; PICTON ISLAND, BANNER COVE, 5 M (AS).

DEPTH RANGE: LOW WATER-115 M.

OEDICEROIDES BREVIROSTRIS SCHELLENBERG

OEDICEROIDES BREVIROSTRIS SCHELLENBERG, 1931:144, FIG. 76.
OEDICEROIDES BREVIROSTRIS. J.L.BARNARD, 1958B:106.
OEDICEROIDES BREVIROSTRIS. J.L.BARNARD, 1961:89, FIG. 56E, (KEY).
OEDICEROIDES BREVIROSTRIS. J.L.BARNARD, 1969A:376,384.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 250 M; MORAINE FJORD, 125 M; 'SUDFJORD', 195 M (AS).

DEPTH RANGE: 125-250 M.

OEDICEROIDES CALMANI WALKER

OEDICEROIDES CALMANI WALKER, 1906B:15.
OEDICEROIDES CALMANI. WALKER, 1907:22, PL. 6, FIG. 12.
OEDICEROIDES CALMANI. STRAUSS, 1909:6,10,13,16,19, PL. 2, FIGS. 6-8.
OEDICEROIDES CALMANI. CHEVREUX, 1913:128, FIGS. 28-30.
OEDICEROIDES CALMANI. K.H.BARNARD, 1930:366.
OEDICEROIDES CALMANI. K.H.BARNARD, 1932:140, (IN PART, PART =OEDICEROIDES LAHILLEI).
OEDICEROIDES CALMANI. NICHOLLS, 1938:87.
OEDICEROIDES CALMANI. SHOEMAKER, 1945A:290.
OEDICEROIDES CALMANI. DAHL, 1954:290.
OEDICEROIDES CALMANI. J.L.BARNARD, 1958B:106.
OEDICEROIDES CALMANI. J.L.BARNARD, 1961:89, FIG. 56C, (KEY).
OEDICEROIDES CALMANI. BELLAN-SANTINI, 1972A:221, PL. 31.
OEDICEROIDES CALMANI. THURSTON, 1974B:65.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 283-540 M (GEN); GEOLOGIE ARCHIPELAGO, 15 M; CAPE GEODESIE, 170-240 M (DBS).
DAVIS SEA: 198-216 M (GEN).
MARGUERITE BAY: 200-254 M (EC).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-500 M, GAND ISLAND, 160 M; BISMARCK STRAIT, 90-130 M (KHB); NENY FJORD, 27 M (CRS).
ROSS SEA: COULMAN ISLAND, 180 M; 'FLAGON POINT'; ROSS ICE SHELF, 180 M (AOW); MCMURDO SOUND, 256-379 M (KHB); 'DISCOVERY INLET', 550 M (ED).
SOUTH GEORGIA: OFF 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 26-35 M; UNDINE HARBOUR, 18-27 M; CUMBERLAND EAST BAY, 18-110 M; 53 52 S 36 08 W, 160 M; 54 59 S 35 24 W, 130 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, 244-344 M (KHB).

DEPTH RANGE: 15-550 M.

OEDICEROIDES CINDERELLA STEBBING

OEDICEROIDES CINDERELLA STEBBING, 1888:850, PLS. 62,63.
HALIMEDON CINDERELLA. DELLA VALLE, 1893:540, PL. 58, FIGS. 43-45.
OEDICEROIDES CINDERELLA. STEBBING, 1906:269.
OEDICEROIDES CINDERELLA. K.H.BARNARD, 1916:162.
OEDICEROIDES CINDERELLA. K.H.BARNARD, 1940:516.
OEDICEROIDES CINDERELLA. J.L.BARNARD, 1958B:106.
OEDICEROIDES CINDERELLA. J.L.BARNARD, 1961:89, FIG. 56, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: 48 37 S 55 17 W, 1863 M (TRRS).

EXTRINSIC DISTRIBUTION: SOUTH AFRICA.

OEDICEROIDES CYSTIFERA SCHELLENBERG

OEDICEROIDES CYSTIFERA SCHELLENBERG, 1931:142, FIG. 75.
OEDICEROIDES CYSTIFERA. J.L.BARNARD, 1958B:106.
OEDICEROIDES CYSTIFERA. J.L.BARNARD, 1961:89, FIG. 56D, (KEY).
OEDICEROIDES CYSTIFERA. SANDERSON, 1973:40.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 40 M (AS).

OEDICEROIDES EMARGINATUS NICHOLLS

OEDICEROIDES EMARGINATUS NICHOLLS, 1938:88, FIG. 47.
OEDICEROIDES EMARGINATUS. J.L.BARNARD, 1958B:106.
OEDICEROIDES EMARGINATUS. J.L.BARNARD, 1961:89, FIG. 56R, (KEY).

DISTRIBUTION: DAVIS SEA: 585 M (GEN).

OEDICEROIDES LAHILLEI CHEVREUX

OEDICEROIDES LAHILLEI CHEVREUX, 1911C:403, FIGS. 1,2.
OEDICEROIDES LAHILLEI. SCHELLENBERG, 1931:139, PL. 1, FIG. D.
OEDICEROIDES LAHILLEI F. POLITA SCHELLENBERG, 1931:140, PL. 1, FIG. E.
OEDICEROIDES CALMANI. K.H.BARNARD, 1932:140, (IN PART).
OEDICEROIDES LAHILLEI. STEPHENSEN, 1947:51.
OEDICEROIDES LAHILLEI. J.L.BARNARD, 1958B:106.
GULBARENTSIA LARSENI OLDEVIG, 1961:73, FIGS. 1,2.
OEDICEROIDES LAHILLEI. THURSTON, 1974A:33.
OEDICEROIDES LAHILLEI F. LAHILLEI. THURSTON, 1974B:66.
OEDICEROIDES LAHILLEI F. POLITA. THURSTON, 1974B:66.

DISTRIBUTION: MAGELLANIC AREA: BEAGLE CHANNEL, 35 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, 5-20 M, PAAL HARBOUR, 5-15 M (MHT).
SOUTH SANDWICH ISLANDS: 55-92 M (EC); SAUNDERS ISLAND; ZAVODOVSKI ISLAND, 56 17 S 27 30 W; CANDLEMAS ISLANDS (MHT), VULCAN POINT; BRISTOL ISLAND; VISOKOI ISLAND, 10-15 M (KS), 55-91 M (MHT), 10-17 M (HO).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 9-13 M (MHT).

DEPTH RANGE: 5-92 M.

OEDICEROIDES MACRODACTYLUS SCHELLENBERG

OEDICEROIDES MACRODACTYLUS SCHELLENBERG, 1931:140, FIG. 74.
OEDICEROIDES MACRODACTYLUS. K.H.BARNARD, 1932:141, FIG. 79.
OEDICEROIDES MACRODACTYLUS. J.L.BARNARD, 1958B:106.
OEDICEROIDES MACRODACTYLUS. J.L.BARNARD, 1961:89, FIG. 56L, (KEY).

DISTRIBUTION: SOUTH GEORGIA: OFF GRYTVIKEN, 22 M; CUMBERLAND BAY, 75-310 M (AS), 120-250 M (KHB); OFF 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 155-178 M; CAPE SAUNDERS, 132-148 M; CUMBERLAND EAST BAY, 200-234 M (KHB).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 22-391 M.

OEDICEROIDES NEWNESI (WALKER)

OEDICEROS NEWNESI WALKER, 1903A:53, PL. 9, FIGS. 62-66, PL. 10, FIGS. 67, 68.
OEDICEROS NEWNESI. STEBBING, 1906:726.
OEDICEROIDES NEWNESI. WALKER, 1907:22.

OEDICEROIDES NEWNESI. SCHELLENBERG, 1926A:339.
OEDICEROIDES LITORALIS SCHELLENBERG, 1926B:226, FIGS. 18A,B.
OEDICEROIDES NEWNESI. K.H.BARNARD, 1930:449.
OEDICEROIDES NEWNESI. SCHELLENBERG, 1931:139.
OEDICEROIDES NEWNESI. J.L.BARNARD, 1958B:106.
OEDICEROIDES NEWNESI. J.L.BARNARD, 1961:89, FIG. 56F, (KEY).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
KERGUELEN ISLANDS: GAZELLE HARBOUR, 5-10 M (AS).
ROSS SEA: CAPE ADARE, BEACH; WINTER QUARTERS BAY; TENT ISLAND, 36 M (AOW); MCMURDO SOUND, 13-36 M (KHB).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M; OFF GRYTVIKEN, 10-95 M (AS).

DEPTH RANGE: BEACH-385 M.

OEDICEROIDES ROSTRATA (STEBBING)

OEDICEROPSIS ROSTRATA STEBBING, 1883:204.
OEDICEROIDES ROSTRATA. STEBBING, 1888:844, PLS. 60,61, (AS OEDICEROIDES CONSPICUA ON PLATES).
HALIMEDON ROSTRATUS. DELLA VALLE, 1893:540, PL. 58, FIGS. 46-49.
OEDICEROIDES ROSTRATUS. STEBBING, 1906:268, FIG. 67.
OEDICEROIDES ROSTRATUS. J.L.BARNARD, 1958B:106.
OEDICEROIDES ROSTRATUS. J.L.BARNARD, 1961:89, FIG. 56K, (KEY).

DISTRIBUTION: HEARD ISLAND: 270 M (TRRS).
KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS).

DEPTH RANGE: 229-270 M.

OEDICEROIDES SIMILIS NICHOLLS

OEDICEROIDES SIMILIS NICHOLLS, 1938:89, FIG. 48.
OEDICEROIDES SIMILIS. J.L.BARNARD, 1958B:106.
OEDICEROIDES SIMILIS. J.L.BARNARD, 1961:89, FIG. 56A, (KEY).
OEDICEROIDES SIMILIS. BELLAN-SANTINI, 1972A:221.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 15 M (DBS).
DAVIS SEA: 432 M (GEN).

DEPTH RANGE: 15-432 M.

OEDICEROPSIS (PAROEDICEROIDES) SINUATA SCHELLENBERG

PAROEDICEROIDES SINUATA SCHELLENBERG, 1931:146, FIG. 77.
PAROEDICEROIDES SINUATA. J.L.BARNARD, 1958B:107.
OEDICEROPSIS SINUATA. J.L.BARNARD, 1966A:78.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M; OFF GRYTVIKEN, 22 M; MORAINE FJORD, 125 M (AS).

DEPTH RANGE: 22-310 M.

PARAPERIOCULODES BELGICAE RUFFO

PARAPERIOCULODES BELGICAE RUFFO, 1949:22, FIGS. 5,6.
PARAPERIOCULODES BELGICAE. J.L.BARNARD, 1958B:107.

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 48 S 91 54 W (SR).

PARAPERIOCULODES BREVIMANUS K.H.BARNARD

PARAPERIOCULODES BREVIMANUS K.H.BARNARD, 1931A:427.
PARAPERIOCULODES BREVIMANUS. K.H.BARNARD, 1932:135, FIG. 75.
PARAPERIOCULODES BREVIMANUS. J.L.BARNARD, 1958B:107.

DISTRIBUTION: SOUTH GEORGIA: STROMNESS HARBOUR, 155-178 M; JASON HARBOUR, 60-160 M; WILSON HARBOUR, 26-83 M; CUMBERLAND EAST BAY, 0-200 M (KHB).

DEPTH RANGE: 0-200 M.

PARAPERIOCULODES MICRORHYNCHUS RUFFO

PARAPERIOCULODES MICRORHYNCHUS RUFFO, 1949:24, FIG. 7.
PARAPERIOCULODES MICRORHYNCHUS. J.L.BARNARD, 1958B:107.

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 15 S 85 06 W (SR).

PARHALIMEDON TURQUETI CHEVREUX

PARHALIMEDON TURQUETI CHEVREUX, 1906B:76, FIG. 1.
PARHALIMEDON TURQUETI. CHEVREUX, 1906E:34, FIGS. 18-20.
PARHALIMEDON TURQUETI. SCHELLENBERG, 1931:149, FIG. 78.
PARHALIMEDON TURQUETI. J.L.BARNARD, 1958B:107.
PARHALIMEDON TURQUETI. THURSTON, 1974A:32.

DISTRIBUTION: PALMER ARCHIPELAGO: WIENCKE ISLAND, 20-25 M (EC).
SOUTH GEORGIA: OFF GRYTVIKEN, 22-50 M (AS).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 5-20 M, PAAL HARBOUR, 5-15 M (MHT).

DEPTH RANGE: 5-50 M.

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PAGETINIDAE

HETEROCRESSA MONODI NICHOLLS

HETEROCRESSA MONODI NICHOLLS, 1938:57, FIG. 29.
HETEROCRESSA MONODI. J.L.BARNARD, 1958B:108.
HETEROCRESSA MONODI. J.L.BARNARD, 1972C:143.

DISTRIBUTION: MACQUARIE ISLAND: (GEN).

PAGETINA GENARUM K.H.BARNARD

PAGETINA GENARUM K.H.BARNARD, 1931A:427.
PAGETINA GENARUM. K.H.BARNARD, 1932:131, FIG. 74.
PAGETINA GENARUM. J.L.BARNARD, 1958B:108.
PAGETINA GENARUM. BELLAN-SANTINI AND LEDOYER, 1974:694, PL. 34.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, AUSTRALIA ISLAND, 24 M, HOSKYN ISLAND, 120 M (BS&L).
SOUTH GEORGIA: CUMBERLAND EAST BAY, OFF DARTMOUTH POINT, 0-40 M; CUMBERLAND BAY, 120-204 M; OFF 'JASON LIGHT', 238-270 M (KHB).

DEPTH RANGE: 0-270 M.

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PARAMPHITHOIDAE

ACTINACANTHUS TRICARINATUS (STEBBING)

ACANTHOZONE TRICARINATA STEBBING, 1883:205.
ACANTHOZONE TRICARINATA. STEBBING, 1885:621, FIG. 208.
ACANTHECHINUS TRICARINATUS. STEBBING, 1888:884, PLS. 69,70.
ACANTHOZONE TRICARINATA. DELLA VALLE, 1893:601, PL. 59, FIG. 11.
ACTINACANTHUS TRICARINATUS. STEBBING, 1906:326, FIGS. 74-76.
ACTINACANTHUS TRICARINATUS. J.L.BARNARD, 1958B:108.

DISTRIBUTION: HEARD ISLAND: 52 04 S 71 22 E, 270 M (TRRS).

ECLYSIS SIMILIS K.H.BARNARD

ECLYSIS SIMILIS K.H.BARNARD, 1932:182, FIG. 112.
EPIMERIOPSIS AUSTRALIS. K.H.BARNARD, 1931A:428.
ECLYSIS SIMILIS. J.L.BARNARD, 1958B:108.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 230-250 M (KHB).

EPIMERIA EXCISIPES K.H.BARNARD

EPIMERIA EXCISIPES K.H.BARNARD, 1932:174, FIGS. 104E,106,107.
EPIMERIA EXCISIPES. J.L.BARNARD, 1958B:108.
EPIMERIA EXCISIPES. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA EXCISIPES. MCCAIN, 1971:161, TABLE 1.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
SOUTH GEORGIA: CUMBERLAND WEST BAY, 110 M; CUMBERLAND BAY, 120-250 M; STROMNESS HARBOUR, 122-178 M; CAPE SAUNDERS, 132-148 M; 53 51 S 36 21 W, 200-236 M; 53 52 S 36 08 W, 160 M; 54 59 S 35 24 W, 130 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 90-391 M.

EPIMERIA GEORGIANA SCHELLENBERG

EPIMERIA GEORGIANA SCHELLENBERG, 1931:160.
EPIMERIA GEORGIANA. J.L.BARNARD, 1958B:108.
EPIMERIA GEORGIANA. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA GEORGIANA. MCCAIN, 1971:161, TABLE 1.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 75-310 M (AS).

EPIMERIA INERMIS WALKER

EPIMERIA INERMIS WALKER, 1903A:54, PL. 10, FIG. 69.
EPIMERIA INERMIS. STEBBING, 1906:728.
EPIMERIA INERMIS. WALKER, 1907:23, PL. 8, FIG. 13.
EPIMERIA INERMIS. K.H.BARNARD, 1930:374, FIG. 40B.
EPIMERIA INERMIS. K.H.BARNARD, 1932:173, FIG. 104A.
EPIMERIA INERMIS. NICHOLLS, 1938:95, FIG. 50.
EPIMERIA INERMIS. J.L.BARNARD, 1958B:108.
EPIMERIA INERMIS. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA INERMIS. MCCAIN, 1971:161, TABLE 1.
EPIMERIA INERMIS. BELLAN-SANTINI, 1972A:223, PL. 32.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 108 M (GEN); GEOLOGIE ARCHIPELAGO, 15-45 M; CAPE GEODESIE, 45-80 M (DBS).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
FALKLAND ISLANDS: WEST OF FALKLAND ISLANDS, 229 M (KHB).
ROSS SEA: CAPE ADARE, 50 M; WINTER QUARTERS BAY, 193 M (AOW); MCMURDO SOUND, 256-379 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 15-379 M.

EPIMERIA INTERMEDIA SCHELLENBERG

EPIMERIA INTERMEDIA SCHELLENBERG, 1931:161, FIG. 84, PL. 1, FIG. F.
EPIMERIA INTERMEDIA. K.H.BARNARD, 1932:177, FIGS. 104C,109.
EPIMERIA INTERMEDIA. J.L.BARNARD, 1958B:108.
EPIMERIA INTERMEDIA. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA INTERMEDIA. MCCAIN, 1971:161, TABLE 1.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 75 M (AS); CUMBERLAND EAST BAY, 88-273 M; STROMNESS HARBOUR, 122-136 M (KHB).

DEPTH RANGE: 75-273 M.

EPIMERIA MACRODONTA WALKER

EPIMERIA MACRODONTA WALKER, 1906B:16.
EPIMERIA MACRODONTA. WALKER, 1907:24, PL. 8, FIG. 14.
EPIMERIA SIMILIS CHEVREUX, 1912:215.
EPIMERIA MACRODONTA. CHILTON, 1912:486.
EPIMERIA MACRODONTA. CHEVREUX, 1913:148.
EPIMERIA SIMILIS. CHEVREUX, 1913:149, FIGS. 41-43.
EPIMERIA SIMILIS. SCHELLENBERG, 1926A:343.
EPIMERIA MACRODONTA. SCHELLENBERG, 1926A:343.
EPIMERIA MACRODONTA FORMA MACRODONTA. K.H.BARNARD, 1930:372.
EPIMERIA MACRODONTA FORMA SIMILIS. K.H.BARNARD, 1930:373.
EPIMERIA MACRODONTA FORMA MACRODONTA. K.H.BARNARD, 1932:172, FIG. 105.

EPIMERIA MACRODONTA FORMA SIMILIS. K.H.BARNARD, 1932:172.
EPIMERIA MACRODONTA. NICHOLLS, 1938:95.
EPIMERIA MACRODONTA. STEPHENSEN, 1947:53.
EPIMERIA MACRODONTA. J.L.BARNARD, 1958B:108.
EPIMERIA MACRODONTA. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA MACRODONTA. DEARBORN, 1967:45.
EPIMERIA MACRODONTA. MCCAIN, 1971:161, TABLE 1.
EPIMERIA MACRODONTA. BELLAN-SANTINI, 1972A:223.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-720 M (GEN); CAPE GEODESIE, 115-135 M; GEOLOGIE ARCHIPELAGO, 30-35 M (DBS).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
COATS LAND: 74 01 S 22 W, 290 M (CC).
DAVIS SEA: 216 M (GEN); 'GAUSS STATION', 385 M (AS).
MARGUERITE BAY: 200 M (EC).
OATES COAST: 329-366 M (KHB).
PALMER ARCHIPELAGO: PORT LOCKROY, 30 M (KS), NEUMAYER CHANNEL, 60-70 M (EC); SCHOLLAERT CHANNEL, 160-500 M (KHB).
ROSS SEA: WINTER QUARTERS BAY, 900 M (AOW); MCMURDO SOUND, 92-547 M (KHB), 100 M (JHD).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 420 M (EC); CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 30-900 M.

EPIMERIA MONODON STEPHENSEN

EPIMERIA MONODON STEPHENSEN, 1947:53, FIG. 19.
EPIMERIA MONODON. J.L.BARNARD, 1958B:108.
EPIMERIA MONODON. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA MONODON. MCCAIN, 1971:161, TABLE 1.
EPIMERIA MONODON. THURSTON, 1974A:34.
EPIMERIA MONODON. THURSTON, 1974B:66.

DISTRIBUTION: PALMER ARCHIPELAGO: FLANDRES BAY, 2-10 M (KS); PORT LOCKROY, LOW TIDE, GOUDIER ISLAND, LOW TIDE (MHT).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 3-15 M, PAAL HARBOUR, 5-15 M (MHT).

DEPTH RANGE: LOW TIDE-15 M.

EPIMERIA PUNCTICULATA K.H.BARNARD

EPIMERIA PUNCTICULATA K.H.BARNARD, 1930:376, FIG. 42.
EPIMERIA PUNCTICULATA. K.H.BARNARD, 1932:175, FIG. 104D.
EPIMERIA PUNCTICULATA. J.L.BARNARD, 1958B:108.
EPIMERIA PUNCTICULATA. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA PUNCTICULATA. MCCAIN, 1971:161, TABLE 1.

DISTRIBUTION: ROSS SEA: MCMURDO SOUND, 92-175 M (KHB).
SOUTH GEORGIA: OFF 'JASON LIGHT', 238-270 M; CUMBERLAND BAY, 230-250 M; STROMNESS HARBOUR, 122-136 M; CAPE SAUNDERS, 132-148 M; CUMBERLAND EAST BAY, 60-110 M; 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 60-270 M.

EPIMERIA ROBUSTA K.H.BARNARD

EPIMERIA ROBUSTA K.H.BARNARD, 1930:375,449, FIGS. 40A,41.
EPIMERIA ROBUSTA. J.L.BARNARD, 1958B:108.
EPIMERIA ROBUSTA. J.L.BARNARD, 1961:103, (KEY).
EPIMERIA ROBUSTA. MCCAIN, 1971:161, TABLE 1.

DISTRIBUTION: ROSS SEA: CAPE ADARE, 82-92 M; MCMURDO SOUND, 92-547 M; CAPE ROYDS, 110-146 M (KHB).

DEPTH RANGE: 82-547 M.

EPIMERIELLA MACRONYX WALKER

EPIMERIELLA MACRONYX WALKER, 1906B:17.
EPIMERIELLA MACRONYX. WALKER, 1907:26, PL. 9, FIG. 15.
EPIMERIELLA MACRONYX. SCHELLENBERG, 1926A:344.
EPIMERIELLA MACRONYX. K.H.BARNARD, 1930:378.
EPIMERIELLA MACRONYX. K.H.BARNARD, 1932:178, PL. 1, FIG. 3.
EPIMERIELLA MACRONYX. RUFFO, 1949:32, FIG. 5.

EPIMERIELLA MACRONYX. J.L.BARNARD, 1958B:108.
EPIMERIELLA MACRONYX. DEARBORN, 1967:45.
EPIMERIELLA MACRONYX. EMISON, 1968:202, FIG. 12, TABLES 10-12.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: WINTER QUARTERS BAY, 9-18 M (AOW); MCMURDO SOUND, 0-350 M (KHB), 100 M (JHD); CAPE CROZIER; BEAUFORT ISLAND; FRANKLIN ISLAND (WBE).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, 320 M (KHB).

DEPTH RANGE: 0-385 M.

EPIMERIELLA SCABROSA K.H.BARNARD

EPIMERIELLA SCABROSA K.H.BARNARD, 1930:378, FIG. 43.
EPIMERIELLA SCABROSA. J.L.BARNARD, 1958B:108.

DISTRIBUTION: OATES COAST: 329-366 M (KHB).

EPIMERIELLA WALKERI K.H.BARNARD

EPIMERIELLA WALKERI K.H.BARNARD, 1930:380, FIGS. 40C,44.
EPIMERIELLA WALKERI. K.H.BARNARD, 1932:178, FIG. 110.
EPIMERIELLA WALKERI. NICHOLLS, 1938:96.
EPIMERIELLA WALKERI. J.L.BARNARD, 1958B:108.
EPIMERIELLA WALKERI. MCCAIN, 1971:160, FIG. 1.

DISTRIBUTION: DAVIS SEA: 216 M (GEN).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 278-500 M (KHB).
ROSS SEA: MCMURDO SOUND, 256-379 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 216-500 M.

METEPIMERIA ACANTHURUS SCHELLENBERG

METEPIMERIA ACANTHURUS SCHELLENBERG, 1931:162, FIG. 85, PL. 1, FIG. G.
EPIMERIA ACANTHURUS. K.H.BARNARD, 1932:176, FIGS. 104B,108, PL. 1, FIG. 2.
METEPIMERIA ACANTHURUS. J.L.BARNARD, 1958B:108.

DISTRIBUTION: FALKLAND ISLANDS: WEST FALKLAND ISLAND, OFF NORTH ISLAND, 81-82 M; EAST FALKLAND ISLAND, OFF LIVELY ISLAND, 79 M; 53 53 S 60 34 W, 147-151 M (KHB).
MAGELLANIC AREA: PUERTO CONDOR, 90 M; HARRIS BAY, 27 M (AS).

DEPTH RANGE: 27-151 M.

PAREPIMERIA BIDENTATA SCHELLENBERG

PAREPIMERIA BIDENTATA SCHELLENBERG, 1931:164.
PAREPIMERIA BIDENTATA. J.L.BARNARD, 1958B:109.

DISTRIBUTION: SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 10-310 M (AS).

DEPTH RANGE: 10-310 M.

PAREPIMERIA CRENULATA CHEVREUX

PAREPIMERIA CRENULATA CHEVREUX, 1912:216.
PAREPIMERIA CRENULATA. CHEVREUX, 1913:158, FIGS. 47-49.
PAREPIMERIA CRENULATA. K.H.BARNARD, 1932:179.
PAREPIMERIA CRENULATA VAR. MIOTHELE K.H.BARNARD, 1932:180.
PAREPIMERIA CRENULATA. STEPHENSEN, 1947:56.
PAREPIMERIA CRENULATA. J.L.BARNARD, 1958B:109.

DISTRIBUTION: BOUVET ISLAND: CAPE LOLLO, 200 M (KS).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
PALMER ARCHIPELAGO: NEUMAYER CHANNEL, 129 M (EC).
SOUTH GEORGIA: CUMBERLAND BAY, 120-250 M; STROMNESS HARBOUR, 122-178 M; CUMBERLAND EAST BAY, 23-110 M; 53 51 S 36 18 W, 245 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 23-391 M.

PAREPIMERIA MAJOR K.H.BARNARD

PAREPIMERIA MAJOR K.H.BARNARD, 1932:180, FIG. 111.
PAREPIMERIA MAJOR. J.L.BARNARD, 1958B:109.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: OFF DECEPTION ISLAND, 1080 M (KHB).

PSEUDEPIMERIA GRANDIROSTRIS CHEVREUX

PSEUDEPIMERIA GRANDIROSTRIS CHEVREUX, 1912:216.
PSEUDEPIMERIA GRANDIROSTRIS. CHEVREUX, 1913:154, FIGS. 44-46.
PSEUDEPIMERIA GRANDIROSTRIS. NICHOLLS, 1938:97.
PSEUDEPIMERIA GRANDIROSTRIS. J.L.BARNARD, 1958B:109.
PSEUDEPIMERIA GRANDIROSTRIS. BELLAN-SANTINI, 1972A:223.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN); GEOLOGIE ARCHIPELAGO, 90 M (DBS).
MARGUERITE BAY: 254 M (EC).

DEPTH RANGE: 90-540 M.

SUBEPIMERIA GEODESIAE BELLAN-SANTINI

SUBEPIMERIA GEODESIAE BELLAN-SANTINI, 1972A:225, PLS. 33,34.

DISTRIBUTION: ADELIE COAST: CAPE GEODESIE, 115-135 M (DBS).

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PARDALISCIDAE

HALICE MACRONYX (STEBBING)

SYNOPIOIDES MACRONYX STEBBING, 1888:1000,1223, PL. 94A.
SYNOPIOIDES MACRONYX. DELLA VALLE, 1893:852.
SYNOPIOIDES MACRONYX. STEBBING, 1906:227, FIG. 60.
SYNOPIOIDES MACRONYX. SCHELLENBERG, 1926A:336, FIG. 47.
SYNOPIOIDES MACRONYX. SCHELLENBERG, 1926B:225, FIG. 17.
SYNOPIOIDES MACRONYX. K.H.BARNARD, 1932:134.
SYNOPIOIDES MACRONYX. PIRLOT, 1934:173, FIGS. 64-66.
HALICE MACRONYX. BIRSTEIN AND VINOGRADOV, 1955:243, (KEY).
HALICE MACRONYX. J.L.BARNARD, 1958B:109.
SYNOPIOIDES MACRONYX. J.L.BARNARD, 1959:39.
HALICE MACRONYX. BIRSTEIN AND VINOGRADOV, 1962A:46, FIG. 8.
HALICE MACRONYX. BIRSTEIN AND VINOGRADOV, 1962B:253, (KEY).
NOT SYNOPIOIDES MACRONYX. K.H.BARNARD, 1930:363, FIG. 34, (=HALICE SECUNDA).
NOT SYNOPIOIDES MACRONUX. HURLEY, 1954D:784, (=HALICE SECUNDA).
NOT HALICE MACRONYX. J.L.BARNARD, 1972C:199, (=HALICE SECUNDA).

DISTRIBUTION: SOUTHERN OCEAN: PACIFIC SECTOR, 63 18 S 135 14 E, 1100-2200 M (B&V).

EXTRINSIC DISTRIBUTION: INDIAN OCEAN; NORTH AND SOUTH ATLANTIC OCEANS; SOUTH PACIFIC OCEAN.

HALICE PROFUNDI K.H.BARNARD

HALICE PROFUNDI K.H.BARNARD, 1932:134.
HALICE PROFUNDI. BIRSTEIN AND VINOGRADOV, 1955:243, (KEY).
HALICE PROFUNDI. J.L.BARNARD, 1958B:109.
HALICE PROFUNDI. J.L.BARNARD, 1959:38.
HALICE PROFUNDI. BIRSTEIN AND VINOGRADOV, 1962B:253, (KEY).

DISTRIBUTION: SOUTH GEORGIA: OFF BARFF POINT, 150-240 M; OFF 'JASON LIGHT', 238-270 M; CUMBERLAND EAST BAY, 60-273 M (KHB).
SOUTH SHETLAND ISLANDS: OFF LIVINGSTON ISLAND, 0-800 M (KHB).

DEPTH RANGE: 0-800 M.

HALICE SECUNDA (STEBBING)

SYNOPIOIDES SECUNDUS STEBBING, 1888:1224.
SYNOPIOIDES SECUNDUS. STEBBING, 1906:227.
SYNOPIOIDES SECUNDA. SCHELLENBERG, 1926B:224, FIG. 16.

SYNOPIOIDES MACRONYX. K.H.BARNARD, 1930:363, FIG. 34.
SYNOPIOIDES MACRONUX. HURLEY, 1954D:784.
HALICE SECUNDA. BIRSTEIN AND VINOGRADOV, 1955:244, (KEY).
SYNOPIOIDES SECUNDA. SCHELLENBERG, 1955:190,194, FIG. 4.
HALICE SECUNDA. J.L.BARNARD, 1958B:109.
HALICE SECUNDA. BIRSTEIN AND VINOGRADOV, 1958:239,249,250, FIGS. 11,16.
SYNOPIOIDES SECUNDA. J.L.BARNARD, 1959:39.
HALICE SECUNDA. DAHL, 1959:231.
HALICE SECUNDA. BIRSTEIN AND VINOGRADOV, 1960:216,227.
HALICE SECUNDA. BIRSTEIN AND VINOGRADOV, 1962A:46.
HALICE SECUNDA. BIRSTEIN AND VINOGRADOV, 1962B:250,251,253, (KEY).
HALICE MACRONYX. J.L.BARNARD, 1972C:199.

DISTRIBUTION: SOUTHERN OCEAN: INDIAN SECTOR, 62 55 S 118 52 E, 0-3700 M (B&V).

EXTRÍNSIC DISTRIBUTION: KERMADEC TRENCH; NEW ZEALAND; NORTH AND SOUTH ATLANTIC OCEANS; NORTH AND SOUTH PACIFIC OCEANS; PHILIPPINE TRENCH.

HALICE TENELLA BIRSTEIN AND VINOGRADOV

HALICE TENELLA BIRSTEIN AND VINOGRADOV, 1962A:47, FIG. 9.
HALICE TENELLA. BIRSTEIN AND VINOGRADOV, 1962B:253, (KEY).

DISTRIBUTION: SOUTHERN OCEAN: PACIFIC SECTOR, 64 03 S 161 59 E, 0-3000 M (B&V).

HALICELLA PARASITICA SCHELLENBERG

HALICELLA PARASITICA SCHELLENBERG, 1926A:334, FIG. 46.
HALICELLA PARASITICA. J.L.BARNARD, 1958B:110.
HALICELLA PARASITICA. J.L.BARNARD, 1959:38.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

NECOCHEA PARDELLA J.L.BARNARD

NECOCHEA PARDELLA J.L.BARNARD, 1962D:62, FIGS. 54,55, TABLES 6,9.

DISTRIBUTION: EAST SCOTIA BASIN: 55 19 S 37 57 W, 3725 M (JLB).

NICIPPE UNIDENTATA K.H.BARNARD

NICIPPE UNIDENTATA K.H.BARNARD, 1932:133.
? NICIPPE UNIDENTATA. ENEQUIST, 1949:325, (PROBABLY =NICIPPE TUMIDA, ACCORDING TO J.L.BARNARD, 1959).
NICIPPE UNIDENTATA. J.L.BARNARD, 1958B:110.
? NICIPPE UNIDENTATA. J.L.BARNARD, 1959:38, (PROBABLY =NICIPPE TUMIDA).

DISTRIBUTION: PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-500 M (KHB).

PARDALISCA ABYSSOIDES K.H.BARNARD

PARDALISCA ABYSSOIDES K.H.BARNARD, 1932:133.
PARDALISCA ABYSSOIDES. J.L.BARNARD, 1958B:110.

DISTRIBUTION: PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).

PARDALISCA MAGELLANICA SCHELLENBERG

PARDALISCA MAGELLANICA SCHELLENBERG, 1931:127.
PARDALISCA MAGELLANICA. J.L.BARNARD, 1958B:110.

DISTRIBUTION: MAGELLANIC AREA: HARRIS BAY, 27 M (AS).

PARDALISCA MARIONIS STEBBING

PARDALISCA MARIONIS STEBBING, 1888:996, PL. 94.
PARDALISCA CUSPIDATA. DELLA VALLE, 1893:692, (IN PART).

PARDALISCA MARIONIS. STEBBING, 1906:224, FIGS. 58,59.
PARDALISCA MARIONIS. J.L.BARNARD, 1958B:110.

DISTRIBUTION: PRINCE EDWARD ISLANDS: MARION ISLAND, 180 M (TRRS).

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PHLIANTIDAE

IPHINOTUS TYPICUS (THOMSON)

IPHIGENIA TYPICA THOMSON, 1882:237, PL. 18, FIG. 4.
IPHIGENIA TYPICA. THOMSON AND CHILTON, 1886:144.
IPHINOTUS CHILTONI STEBBING, 1899C:419, PL. 35B.
IPHIGENIA TYPICA. STEBBING, 1899C:420.
IPHINOTUS TYPICA. THOMSON, 1902:464.
IPHINOTUS TYPICA. HUTTON, 1904:260.
IPHINOTUS TYPICUS. STEBBING, 1906:204,726.
IPHINOTUS TYPICUS. STEPHENSEN, 1927:313.
IPHINOTUS TYPICUS. J.L.BARNARD, 1958B:110.
IPHINOTUS TYPICUS. J.L.BARNARD, 1972C:24,193, FIGS. 67N,107-109, (KEY).
IPHINOTUS TYPICUS. LOWRY, 1974:115,127, FIG. 11A, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, MASKED ISLAND, ROCKY COAST (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

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PHOXOCEPHALIDAE

COXOPHOXUS COXALIS (K.H.BARNARD)

PHOXOCEPHALUS COXALIS K.H.BARNARD, 1932:97, FIG. 48.
PHOXOCEPHALUS COXALIS. J.L.BARNARD, 1958B:118.
PHOXOCEPHALUS COXALIS. J.L.BARNARD, 1960B:294.
COXOPHOXUS COXALIS. J.L.BARNARD, 1966A:84.
PHOXOCEPHALUS COXALIS. J.L.BARNARD, 1969A:415.

DISTRIBUTION: SOUTH GEORGIA: FROM 53 42 S 37 12 W TO 53 29 S 37 13 W, 0-5 M (KHB).

HETEROPHOXUS TRICHOSUS K.H.BARNARD

HETEROPHOXUS TRICHOSUS K.H.BARNARD, 1932:100, FIG. 50.
HETEROPHOXUS TRICHOSUS. STEPHENSEN, 1947:38.
HETEROPHOXUS TRICHOSUS. J.L.BARNARD, 1958B:117.
HETEROPHOXUS TRICHOSUS. J.L.BARNARD, 1960B:320.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (KS).

HETEROPHOXUS VIDENS K.H.BARNARD

HETEROPHOXUS VIDENS K.H.BARNARD, 1930:334,449, FIG. 11.
HARPINIA OBTUSIFRONS. WALKER, 1907:17.
HARPINIA OBTUSIFRONS. CHILTON, 1912:477.
HETEROPHOXUS VIDENS. SCHELLENBERG, 1931:74, FIGS. 37B,38.
HETEROPHOXUS VIDENS. K.H.BARNARD, 1932:100.
HETEROPHOXUS VIDENS. SCHELLENBERG, 1935:232.
HETEROPHOXUS VIDENS. NICHOLLS, 1938:46, FIG. 24.
HETEROPHOXUS VIDENS. HURLEY, 1954A:587, (KEY).
HETEROPHOXUS VIDENS. J.L.BARNARD, 1958B:117.
HETEROPHOXUS VIDENS. J.L.BARNARD, 1960B:319.
HETEROPHOXUS VIDENS. BELLAN-SANTINI, 1972A:227, PL. 35.
HETEROPHOXUS VIDENS. BELLAN-SANTINI, 1972B:699.
HETEROPHOXUS VIDENS. THURSTON, 1974A:21.
HETEROPHOXUS VIDENS. THURSTON, 1974B:66.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 7-45 M (GEN); GEOLOGIE ARCHIPELAGO, 6-15 M (DBS).
FALKLAND ISLANDS: PORT LOUIS, 2-8 M (AS).

MAGELLANIC AREA: PUNTA ARENAS, 13-14 M; TRIBUNA BANK; MAGELLAN SOUND, 5-7 M; USHUAIA BAY, 18 M; 'KATANUSHUAIA', 18-22 M; PUERTO EUGENIA, 18-27 M; PUERTO TORO, 36-45 M (AS).
MARGUERITE BAY: STONINGTON ISLAND, 31 M (MHT).
ROSS SEA: OFF CAPE ADARE, 82-92 M; MCMURDO SOUND, 13-457 M (KHB); WINTER QUARTERS BAY, HUT POINT (AOW).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M; OFF GRYTVIKEN, 22 M (AS); CUMBERLAND WEST BAY, 110 M; UNDINE HARBOUR, 18-27 M; 53 51 S 36 21 W, 200-236 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, BORGE BAY, 7-9 M (MHT).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 2-457 M.

EXTRINSIC DISTRIBUTION: CHILE.

PARAPHOXUS CORNUTUS (SCHELLENBERG)

METHARPINIA CORNUTA SCHELLENBERG, 1931:68, FIG. 35.
PARAPHOXUS CORNUTUS. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS CORNUTA. J.L.BARNARD, 1958B:117.
PARAPHOXUS CORNUTUS. J.L.BARNARD, 1960B:271.

DISTRIBUTION: MAGELLANIC AREA: PUNTA ARENAS, 4-14 M; USHUAIA BAY, LOW TIDE (AS).

DEPTH RANGE: LOW TIDE-14 M.

PARAPHOXUS FEUGIENSIS (SCHELLENBERG)

PARHARPINIA FUEGIENSIS SCHELLENBERG, 1931:78, FIG. 40.
PARHARPINIA FUEGIENSIS. STEPHENSEN, 1949:5.
PARAPHOXUS FUEGIENSIS. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS FUEGIENSIS. J.L.BARNARD, 1958B:118.
PARAPHOXUS FUEGIENSIS. J.L.BARNARD, 1960B:271, PL. 42.
PARHARPINIA FUEGIENSIS. SANDERSON, 1973:43.

DISTRIBUTION: MAGELLANIC AREA: ULTIMA ESPERANZA, 13-18 M; PUERTO HOPE, 11-18 M; PUERTO CONDOR, 90 M; PUNTA ARENAS, LOW TIDE; BAHIA INUTIL, 36-54 M; NAVARINO ISLAND, 18 M; STRAIT OF MAGELLAN (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 75-310 M; OFF GRYTVIKEN, 22 M (AS).

DEPTH RANGE: LOW TIDE-310 M.

PARAPHOXUS OBLIQUUS (K.H.BARNARD)

PARHARPINIA OBLIQUA K.H.BARNARD, 1932:101, FIG. 51.
PARAPHOXUS OBLIQUUS. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS OBLIQUA. J.L.BARNARD, 1958B:118.
PARAPHOXUS OBLIQUUS. J.L.BARNARD, 1960B:274.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
SOUTH GEORGIA: 54 22 S 35 21 W, 0-5 M (KHB).

DEPTH RANGE: 0-200 M.

PARAPHOXUS PYRIPES K.H.BARNARD

PARAPHOXUS PYRIPES K.H.BARNARD, 1930:332, FIG. 10.
PONTHARPINIA MAXIMA STEPHENSEN, 1947:42, FIGS. 15,16.
PARAPHOXUS MAXIMA. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS PYRIPES. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS MAXIMA. J.L.BARNARD, 1958B:118.
PARAPHOXUS PYRIPES. J.L.BARNARD, 1958B:118.
PARAPHOXUS PYRIPES. J.L.BARNARD, 1960B:277.
PARAPHOXUS PYRIPES. J.L.BARNARD, 1961:72.

DISTRIBUTION: CAMPBELL ISLAND: 53 35 S 173 06 E, SURFACE (KHB).
ROSS SEA: MCMURDO SOUND, 256-293 M (KHB).
SOUTH SHETLAND ISLANDS: BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: SURFACE-750 M.

EXTRINSIC DISTRIBUTION: TASMAN SEA.

PARAPHOXUS ROSTRATUS (DANA)

UROTHOE ROSTRATUS DANA, 1853-55:921, PL. 62, FIGS. 5A-P.
UROTHOE ROSTRATUS. BATE, 1862:118, PL. 20, FIG. 4.
PHOXUS ROSTRATUS. BOECK, 1876:214.
PHOXUS BATEI HASWELL, 1880A:259, PL. 9, FIG. 3.
PHOXUS BATEI. HASWELL, 1882:237.
PHOXOCEPHALUS BATEI. DELLA VALLE, 1893:743.
PHOXOCEPHALUS ROSTRATUS. DELLA VALLE, 1893:744.
PONTHARPINIA ROSTRATA. STEBBING, 1906:146.
PONTHARPINIA ROSTRATA. STEBBING, 1910A:635.
? PONTHARPINIA ROSTRATUS. STEBBING, 1914:357, (QUESTIONED BY J.L.BARNARD, 1960B).
PONTHARPINIA ROSTRATA. PIRLOT, 1932:62, FIGS. 12-14, (IN PART, NOT FIG. 15, =PARAPHOXUS SP.).
PARAPHOXUS ROSTRATUS. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS ROSTRATA. J.L.BARNARD, 1958B:118.
PARAPHOXUS ROSTRATUS. J.L.BARNARD, 1960B:277.
NOT PONTHARPINIA ROSTRATA. K.H.BARNARD, 1931B:119, FIG. 1, (=PARAPHOXUS BARNARDI).

DISTRIBUTION: FALKLAND ISLANDS: LOW WATER (TRRS).

EXTRINSIC DISTRIBUTION: AUSTRALIA.

PARAPHOXUS ROTUNDIFRONS (K.H.BARNARD)

PARHARPINIA ROTUNDIFRONS K.H.BARNARD, 1932:104, FIG. 53.
PONTHARPINIA ? ROTUNDIFRONS. STEPHENSEN, 1947:44, FIG. 17.
PARAPHOXUS ROTUNDIFRONS. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS ROTUNDIFRONS. J.L.BARNARD, 1958B:118.
PARAPHOXUS ROTUNDIFRONS. J.L.BARNARD, 1960B:278.
PARHARPINIA ROTUNDIFRONS. THURSTON, 1974A:21, FIGS. 8A,B.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND EAST BAY, 17-235 M; UNDINE HARBOUR, 18-27 M (KHB).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, LITTORAL-20 M, PAAL HARBOUR, 20-25 M (MHT).
SOUTH SANDWICH ISLANDS: VISOKOI ISLAND, 10-17 M (KS).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND (KS).

DEPTH RANGE: LITTORAL-235 M.

PARAPHOXUS SINUATUS (K.H.BARNARD)

PARHARPINIA SINUATA K.H.BARNARD, 1932:103, FIG. 52.
PARHARPINIA VILLOSA. SCHELLENBERG, 1931:75, FIG. 39.
PARHARPINIA VILLOSA. SCHELLENBERG, 1935:232.
PARAPHOXUS SINUATUS. J.L.BARNARD, 1958A:147.
PARAPHOXUS SINUATA. J.L.BARNARD, 1958B:118.
PARAPHOXUS SINUATUS. J.L.BARNARD, 1960B:278, PL. 45.

DISTRIBUTION: MAGELLANIC AREA: 54 00 S 64 57 W, 118 M (KHB); PUNTA ARENAS, 13-14 M; BAHIA INUTIL, 20-54 M; NUEVA ISLAND, 54 M; SMYTH CHANNEL, 14 M; 54 43 S 64 08 W, 36 M (AS).
SOUTH GEORGIA: 53 52 S 36 08 W, 160 M (KHB).

DEPTH RANGE: 13-160 M.

EXTRINSIC DISTRIBUTION: CHILE; SOUTH ATLANTIC OCEAN.

PARAPHOXUS UNCINATUS (CHEVREUX)

PONTHARPINIA UNCINATA CHEVREUX, 1912:211.
PONTHARPINIA UNCINATA. CHEVREUX, 1913:100, FIGS. 10-12.
PARAPHOXUS UNCINATUS. J.L.BARNARD, 1958A:146, (BY IMPLICATION).
PARAPHOXUS UNCINATA. J.L.BARNARD, 1958B:118.
PARAPHOXUS UNCINATUS. J.L.BARNARD, 1960B:283.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, NEUMAYER CHANNEL, 60-70 M (EC).

PHOXOCEPHALUS KERGUELENI STEBBING

PHOXOCEPHALUS KERGUELENI STEBBING, 1888:816, PL. 55, (AS PHOXUS KERGUELENI ON PLATE).
PHOXOCEPHALUS KERGUELENI. DELLA VALLE, 1893:742.

PHOXOCEPHALUS KERGUELENI. STEBBING, 1906:135.
PHOXOCEPHALUS KERGUELENI. SCHELLENBERG, 1926B:195.
PHOXOCEPHALUS KERGUELENI. J.L.BARNARD, 1958B:118.
PHOXOCEPHALUS KERGUELENI. J.L.BARNARD, 1960B:300.
PHOXOCEPHALUS KERGUELENI. J.L.BARNARD, 1964B:21, FIG. 17.
PHOXOCEPHALUS KERGUELENI. J.L.BARNARD, 1967B:135,137,138, FIG. 67.
PHOXOCEPHALUS KERGUELENI. BELLAN-SANTINI AND LEDOYER, 1974:694.
NOT PHOXOCEPHALUS KERGUELENI. CHILTON, 1909A:618, (=PHOXOCEPHALUS REGIUM).

DISTRIBUTION: KERGUELEN ISLANDS: (AS); CUMBERLAND BAY, 216 M (TRRS); MORBIHAN BAY, JOLIETTE COVE, 10-54 M (BS&L).

DEPTH RANGE: 10-216 M.

EXTRINSIC DISTRIBUTION: CEDROS TRENCH; PANAMA BASIN.

PROHARPINIA ANTIPODA SCHELLENBERG

PROHARPINIA ANTIPODA SCHELLENBERG, 1931:80, FIG. 41.
PROHARPINIA ANTIPODA. J.L.BARNARD, 1958B:119.
PROHARPINIA ANTIPODA. J.L.BARNARD, 1960B:312, PL. 56.

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, 8 M (AS).
MAGELLANIC AREA: ULTIMA ESPERANZA, 7-9 M; PUERTO ANGOSTO, 18 M; PUERTO CONDOR, 90 M; CAPE VALENTINA, 270 M; 'LAGOTOWIA', 18 M; PUERTO TORO, 36-45 M; USHUAIA BAY, 18 M; 'PUERTO BRIDGES', 13 M; PICTON ISLAND, BANNER COVE, 5 M (AS).

DEPTH RANGE: 5-270 M.

PROHARPINIA HURLEYI J.L.BARNARD

PROHARPINIA HURLEYI J.L.BARNARD, 1958A:149.
HARPINIA OBTUSIFRONS. CHILTON, 1909A:619, (IN PART).
HARPINIA OBTUSIFRONS. THOMSON, 1913:242.
HARPINIA OBTUSIFRONS. STEPHENSEN, 1927:306, FIG. 6.
HETEROPHOXUS STEPHENSENI. HURLEY, 1954A:587,589, FIGS. 29-67, (KEY), (IN PART).
PROHARPINIA HURLEYI. J.L.BARNARD, 1960B:315, PL. 57.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, COLERIDGE BAY, 50 M (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR, 14 M (CC).

DEPTH RANGE: 14-50 M.

PROHARPINIA STEPHENSENI (SCHELLENBERG)

HETEROPHOXUS STEPHENSENI SCHELLENBERG, 1931:73, FIG. 37A.
HETEROPHOXUS STEPHENSENI. HURLEY, 1957B:3.
PROHARPINIA STEPHENSENI. J.L.BARNARD, 1958A:149.
PROHARPINIA STEPHENSENI. J.L.BARNARD, 1958B:119.
PROHARPINIA STEPHENSENI. J.L.BARNARD, 1960B:316, PL. 58.
NOT HETEROPHOXUS STEPHENSENI. HURLEY, 1954A:589, (=PROHARPINIA HURLEYI, IN PART).

DISTRIBUTION: FALKLAND ISLANDS: PORT LOUIS, 2-8 M; PORT ALBEMARLE, 15 M (AS).
MAGELLANIC AREA: USHUAIA BAY, 4-18 M (AS).

DEPTH RANGE: 2-18 M.

PSEUDHARPINIA CARINICEPS (K.H.BARNARD)

HARPINIA CARINICEPS K.H.BARNARD, 1932:99, FIG. 49.
HARPINIA CARINICEPS. J.L.BARNARD, 1958B:116.
HARPINIA CARINICEPS. J.L.BARNARD, 1960B:351.
PSEUDHARPINIA CARINICEPS. J.L.BARNARD, 1969A:414, (BY IMPLICATION).

DISTRIBUTION: PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-335 M; ANVERS ISLAND, FOURNIER BAY, 295 M (KHB).
SOUTH ORKNEY ISLANDS: OFF SIGNY ISLAND, 244-344 M (KHB).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 160-391 M.

PSEUDHARPINIA DENTATA SCHELLENBERG

PSEUDHARPINIA DENTATA SCHELLENBERG, 1931:82, FIG. 42.
PSEUDHARPINIA DENTATA. J.L.BARNARD, 1958B:119.
PSEUDHARPINIA DENTATA. J.L.BARNARD, 1960B:342, PL. 75.
PSEUDHARPINIA DENTATA. J.L.BARNARD, 1969A:414, (BY IMPLICATION).

DISTRIBUTION: MAGELLANIC AREA: 'LAGOTOWIA', 18 M (AS).

PSEUDHARPINIA OBTUSIFRONS (STEBBING)

HARPINIA OBTUSIFRONS STEBBING, 1888:820, PL. 56.
HARPINIA NEGLECTA. DELLA VALLE, 1893:747, (IN PART).
HARPINIA OBTUSIFRONS. STEBBING, 1906:143.
HARPINIA OBTUSIFRONS. SCHELLENBERG, 1926B:195.
HARPINIA OBTUSIFRONS. J.L.BARNARD, 1958B:116.
HARPINIA OBTUSIFRONS. J.L.BARNARD, 1960B:355.
PSEUDHARPINIA OBTUSIFRONS. J.L.BARNARD, 1969A:414, (BY IMPLICATION).
HARPINIA OBTUSIFRONS. BELLAN-SANTINI AND LEDOYER, 1974:694.
NOT HARPINIA OBTUSIFRONS. WALKER, 1907:17, (=HETEROPHOXUS VIDENS).
NOT HARPINIA OBTUSIFRONS. CHILTON, 1909A:619, (=PROHARPINIA HURLEYI, IN PART).
NOT HARPINIA OBTUSIFRONS. CHILTON, 1912:477, (=HETEROPHOXUS VIDENS).
NOT HARPINIA OBTUSIFRONS. THOMSON, 1913:242, (=PROHARPINIA HURLEYI).
NOT HARPINIA OBTUSIFRONS. STEPHENSEN, 1927:306, FIG. 6, (=PROHARPINIA HURLEYI).

DISTRIBUTION: KERGUELEN ISLANDS: (AS), 54-216 M (TRRS); MORBIHAN BAY, 15 M, AUSTRALIA ISLAND, 24 M (BS&L).

DEPTH RANGE: 15-216 M.

PSEUDHARPINIA VALLINI (DAHL)

? HARPINIA VALLINI DAHL, 1954:289, FIGS. 22-35.
PSEUDHARPINIA VALLINI. J.L.BARNARD, 1969A:414, (BY IMPLICATION).

DISTRIBUTION: ROSS SEA: 'DISCOVERY INLET', 550 M (ED).

PSEUDHARPINIA WANDICHIA (J.L.BARNARD)

HARPINIA WANDICHIA J.L.BARNARD, 1962D:50, FIG. 39, TABLE 8.
PSEUDHARPINIA WANDICHIA. J.L.BARNARD, 1969A:414, (BY IMPLICATION).

DISTRIBUTION: VALDIVIA BASIN: 56 43 S 27 41 W, 2747 M (JLB).

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PLEUSTIDAE

AUSTROPLEUSTES CUSPIDATUS K.H.BARNARD

AUSTROPLEUSTES CUSPIDATUS K.H.BARNARD, 1931A:428.
AUSTROPLEUSTES CUSPIDATUS. K.H.BARNARD, 1932:168, FIG. 102.
AUSTROPLEUSTES CUSPIDATUS. J.L.BARNARD, 1958B:119.

DISTRIBUTION: SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

AUSTROPLEUSTES SIMPLEX K.H.BARNARD

AUSTROPLEUSTES SIMPLEX K.H.BARNARD, 1932:169, FIG. 103.
AUSTROPLEUSTES SIMPLEX. J.L.BARNARD, 1958B:119.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 230-250 M (KHB).

MESOPLEUSTES ABYSSORUM (STEBBING)

PLEUSTES ABYSSORUM STEBBING, 1888:872, PL. 67.
ACANTHOZONE ABYSSORUM. DELLA VALLE, 1893:609, PL. 59, FIG. 21.
MESOPLEUSTES ABYSSORUM. STEBBING, 1899D:209.

MESOPLEUSTES ABYSSORUM. STEBBING, 1906:315.
MESOPLEUSTES ABYSSORUM. SCHELLENBERG, 1955:194.
MESOPLEUSTES ABYSSORUM. J.L.BARNARD, 1958B:119.

DISTRIBUTION: PRINCE EDWARD ISLANDS: NEAR MARION ISLAND, 46 16 S 48 27 E, 2880 M (TRRS).

PAREPIMERIELLA IRREGULARIS SCHELLENBERG

PAREPIMERIELLA IRREGULARIS SCHELLENBERG, 1931:165, FIG. 86.
PAREPIMERIELLA IRREGULARIS. J.L.BARNARD, 1958B:109.

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).

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PODOCERIDAE

NEOXENODICE CAPRELLINOIDES SCHELLENBERG

NEOXENODICE CAPRELLINOIDES SCHELLENBERG, 1926C:474, FIG. 3.
NEOXENODICE CAPRELLINOIDES. SCHELLENBERG, 1955:195.
NEOXENODICE CAPRELLINOIDES. J.L.BARNARD, 1958B:122.
NEOXENODICE CAPRELLINOIDES. J.L.BARNARD, 1962D:76, FIGS. 78,79, TABLES 5,8.

DISTRIBUTION: CROZET BASIN: 65 27 S 80 33 E, 3397 M (AS).

EXTRINSIC DISTRIBUTION: CAPE BASIN.

PODOCERUS BRASILIENSIS (DANA)

PLATOPHIUM BRASILIENSE DANA, 1853-55:838, PL. 55, FIGS. 9A-L.
PLATOPHIUM BRASILIENSE. DELLA VALLE, 1893:329, (IN PART).
PODOCERUS BRASILIENSIS. STEBBING, 1899A:239.
PLATOPHIUM SYNAPTOCHIR WALKER, 1904:296, PL. 8, FIG. 52.
PODOCERUS BRASILIENSIS. STEBBING, 1906:704.
PODOCERUS SYNAPTOCHIR. STEBBING, 1906:741.
PODOCERUS SYNAPTOCHEIR. WALKER, 1909:343.
PODOCERUS BRASILIENSIS. STEBBING, 1914:373.
PODOCERUS SYNAPTOCHIR. K.H.BARNARD, 1916:279.
PODOCERUS BRASILIENSIS. STEBBING, 1917:447.
PODOCERUS BRASILIENSIS. SHOEMAKER, 1921:102.
PODOCERUS BRASILIENSIS. K.H.BARNARD, 1925:366.
PODOCERUS BRASILIENSIS. GRAVELY, 1927:1.
PODOCERUS BRASILIENSIS. SCHELLENBERG, 1928B:674.
PODOCERUS ? BRASILIENSIS. K.H.BARNARD, 1932:246.
PODOCERUS BRASILIENSIS. K.H.BARNARD, 1935:305.
PODOCERUS BRASILIENSIS. SHOEMAKER, 1935:250.
PODOCERUS BRASILIENSIS. SCHELLENBERG, 1938A:217.
PODOCERUS BRASILIENSIS. SCHELLENBERG, 1938B:94.
PODOCERUS BRASILIENSIS. K.H.BARNARD, 1940:520.
PODOCERUS BRAZILIENSIS. REID, 1951:267,281,289.
PODOCERUS BRAZILIENSIS. RUDWICK, 1951:153, FIG. 3.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1953:87.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1955:39.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1958B:122.
PODOCERUS SYNAPTOCHIR. J.L.BARNARD, 1958B:122.
PODOCERUS BRASILIENSIS. J.L.BARNARD AND REISH, 1959:39, PL. 13.
PODOCERUS BRASILIENSIS. NAYAR, 1959:45, PL. 15, FIGS. 21-26.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1962A:65-67, FIG. 30, (KEY).
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1964D:245.
PODOCERUS BRASILIENSIS. NAYAR, 1965:164, FIGS. 17D,E.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1969B:209.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1970:237, FIGS. 156,157.
PODOCERUS BRASILIENSIS. J.L.BARNARD, 1971B:113,117.
PODOCERUS BRASILIENSIS. RABINDRANATH, 1972:302, FIG. 2.
PODOCEROS BRASILIENSIS. SANDERSON, 1973:44.
PODOCERUS BRASILIENSIS. GRIFFITHS, 1974B:251.
PODOCERUS BRASILIENSIS. GRIFFITHS, 1974C:322.
PODOCERUS BRASILIENSIS. SURYA RAO, 1974:200.

DISTRIBUTION: FALKLAND ISLANDS: STANLEY HARBOUR (TRRS); EAST FALKLAND ISLAND, OFF EDDYSTONE ROCK, 105-115 M (KHB).

EXTRINSIC DISTRIBUTION: GULF OF ADEN: HAWAII; INDIA; SOUTHERN AFRICA; SOUTH ATLANTIC OCEAN; SRI LANKA; SUEZ; WEST COAST OF NORTH AMERICA; ZANZIBAR.

PODOCERUS CAPILLIMANUS NICHOLLS

PODOCERUS CAPILLIMANUS NICHOLLS, 1938:129, FIG. 67.
PODOCERUS CAPILLIMANUS. J.L.BARNARD, 1958B:122.
PODOCERUS CAPILLIMANUS. J.L.BARNARD, 1962A:65, (KEY).
PODOCERUS CAPILLIMANUS. J.L.BARNARD, 1972C:146.
PODOCERUS CAPILLIMANUS. THURSTON, 1974A:103, FIGS. 39I,40A-K.

DISTRIBUTION: MACQUARIE ISLAND: NORTH END, SHORE (GEN).
SOUTH ORKNEY ISLANDS: SIGNY ISLAND, BORGE BAY, 3-20 M (MHT).

DEPTH RANGE: SHORE-20 M.

PODOCERUS CRISTATUS ROTUNDATUS SCHELLENBERG

PODOCERUS CRISTATUS ROTUNDATUS SCHELLENBERG, 1931:260, FIG. 135.
PODOCERUS CRISTATUS ROTUNDATUS. J.L.BARNARD, 1962A:65, (KEY).

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).
MAGELLANIC AREA: 'MARTHA BANK', 180 M (AS).
SHAG ROCKS: 160 M (AS).

DEPTH RANGE: 160-197 M.

EXTRINSIC DISTRIBUTION: SOUTH ATLANTIC OCEAN.

PODOCERUS DANAE (STEBBING)

PLATOPHIUM DANAE STEBBING, 1888:1185, PLS. 128,129.
PLATOPHIUM ORIENTALE. DELLA VALLE, 1893:332, (IN PART).
PODOCERUS DANAE. STEBBING, 1899A:239.
PODOCERUS DANAE. STEBBING, 1906:705, FIG. 122.
PODOCERUS DANAE. CHILTON, 1926:514.
PODOCERUS DANAE. J.L.BARNARD, 1958B:122.
PODOCERUS DANAE. J.L.BARNARD, 1962A:65, (KEY).

DISTRIBUTION: KERGUELEN ISLANDS: OFF CUMBERLAND BAY, 229 M (TRRS).

PODOCERUS SEPTEMCARINATUS SCHELLENBERG

PODOCERUS SEPTEMCARINATUS SCHELLENBERG, 1926A:388, FIG. 68.
PLATOPHIUM HYSTRICOIDES MONOD, 1926:61, FIGS. 59A-E,60A-I.
PODOCERUS SEPTEMCARINATUS. SCHELLENBERG, 1931:259.
PODOCERUS SEPTEMCARINATUS. K.H.BARNARD, 1932:246, FIG. 154.
PODOCERUS SEPTEMCARINATUS. STEPHENSEN, 1947:75, FIG. 25.
PODOCERUS SEPTEMCARINATUS. J.L.BARNARD, 1958B:122.
PODOCERUS SEPTEMCARINATUS. J.L.BARNARD, 1962A:64, (KEY).

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 15 S 84 06 W, 569 M (TM).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 278-500 M; BISMARCK STRAIT, 90-130 M (KHB).
SHAG ROCKS: 160 M (AS).
SOUTH SHETLAND ISLANDS: BRIDGEMAN ISLAND, 750 M (KS).

DEPTH RANGE: 90-750 M.

PODOCERUS SPECIES

PODOCERUS SP. K.H.BARNARD, 1932:247, FIG. 155.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 120-204 M (KHB).

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SEBIDAE

SEBA ANTARCTICA WALKER

SEBA ANTARTICA WALKER, 1906C:154.
SEBA ANTARCTICA. WALKER, 1907:37, PL. 13, FIG. 22.
SEBA ANTARCTICA. K.H.BARNARD, 1930:339.

SEBA ANTARCTICA. SCHELLENBERG, 1931:84,89, FIGS. 47,48, (KEY).
SEBA ANTARCTICA. K.H.BARNARD, 1932:107, FIG. 56.
SEBA ANTARCTICA. NICHOLLS, 1938:47.
SEBA ANTARCTICA. J.L.BARNARD, 1958B:126.
SEBA ANTARCTICA. KARAMAN, 1971B:86.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 5-90 M (GEN).
ROSS SEA: WINTER QUARTERS BAY, 18 M, HUT POINT (AOW); OFF CAPE ADARE, 82-92 M (KHB).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 88-273 M; STROMNESS HARBOUR, 122-136 M (KHB).

DEPTH RANGE: 5-273 M.

SEBA DUBIA SCHELLENBERG

SEBA DUBIA SCHELLENBERG, 1926A:309, FIG. 34.
SEBA SAUNDERSII F. DUBIA. SCHELLENBERG, 1931:84,86, FIG. 45, (KEY).
SEBA DUBIA. J.L.BARNARD, 1958B:126.
SEBA DUBIA. KARAMAN, 1971B:87.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

SEBA SAUNDERSII STEBBING

SEBA SAUNDERSII STEBBING, 1875:186, PL. 15A, FIG. 2.
SEBA SAUNDERSII. STEBBING, 1888:783, PL. 49.
SEBA SAUNDERSI. DELLA VALLE, 1893:774, PL. 60, FIGS. 32-34.
SEBA SAUNDERSII. STEBBING, 1906:163,724, (IN PART, PART =SEBA ARMATA).
PARAVALETTIA CHELATA K.H.BARNARD, 1916:112, PL. 26, FIGS. 2,3.
SEBA SAUNDERSII. SCHELLENBERG, 1931:83,84, (KEY).
SEBA SAUNDERSII F. SAUNDERSII. SCHELLENBERG, 1931:84, FIG. 43, (KEY).
SEBA SAUNDERSII F. GEORGIANA SCHELLENBERG, 1931:84,85, FIG. 44, (KEY).
SEBA SAUNDERSII. K.H.BARNARD, 1932:106, FIG. 55.
? SEBA SAUNDERSII. K.H.BARNARD, 1957:7, FIG. 4, (QUESTIONED BY BELLAN-SANTINI, 1972A).
SEBA SAUNDERSI. J.L.BARNARD, 1958B:126.
SEBA SAUNDERSI. KARAMAN, 1971B:87.
SEBA SAUNDERSII. BELLAN-SANTINI, 1972A:229.
SEBA SAUNDERSII. BELLAN-SANTINI, 1972B:699.
SEBA SAUNDERSII. BELLAN-SANTINI AND LEDOYER, 1974:694.
SEBA SAUNDERSI. GRIFFITHS, 1974C:323.
NOT SEBA SAUNDERSII. HUTTON, 1904:258, (=SEBA TYPICA).

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 13-20 M; CAPE JULES, 5-20 M; CAPE GEODESIE, 230-250 M (DBS).
CROZET ISLANDS: EAST ISLAND, ADVENTURE BAY (BS&L).
FALKLAND ISLANDS: PORT WILLIAM, 22 M; 52 29 S 60 36 W, 197 M (AS); EAST FALKLAND ISLAND, OFF EDDYSTONE ROCK, 105-115 M (KHB).
KERGUELEN ISLANDS: MORBIHAN BAY, BENIGUET REEF, 35 M, JOLIETTE COVE, 10-54 M (BS&L).
MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS); STRAIT OF MAGELLAN, SAN NICOLAS BAY; MAGELLAN SOUND; BEAGLE CHANNEL, 100 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 22 M (AS).

DEPTH RANGE: 5-250 M.

EXTRINSIC DISTRIBUTION: MEDITERRANEAN SEA; SOUTH AFRICA.

SEBA STONINGTONENSIS THURSTON

SEBA STONINGTONENSIS THURSTON, 1974B:67, FIGS. 26,27.

DISTRIBUTION: MARGUERITE BAY: STONINGTON ISLAND, 64 M (MHT).

SEBA SUBANTARCTICA SCHELLENBERG

SEBA SUBANTARCTICA SCHELLENBERG, 1931:84,87, FIG. 46, (KEY).
SEBA SUBANTARCTICA. J.L.BARNARD, 1958B:126.
SEBA SUBANTARCTICA. KARAMAN, 1971B:88.

DISTRIBUTION: BURDWOOD BANK: 53 45 S 61 10 W, 140-150 M (AS).
FALKLAND ISLANDS: PORT ALBEMARLE, 15 M; BERKELEY SOUND, 16 M; PORT WILLIAM, 22 M (AS).
MAGELLANIC AREA: BEAGLE CHANNEL, 55 10 S 66 15 W, 100 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 22 M (AS).

DEPTH RANGE: 15-150 M.

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STEGOCEPHALIDAE

ANDANIOTES CORPULENTUS (THOMSON)

ANONYX CORPULENTUS THOMSON, 1882:231, PL. 17, FIG. 1.
ANONYX CORPULENTUS. THOMSON AND CHILTON, 1886:149.
ANDANIA ABYSSORUM STEBBING, 1888:739, PL. 37.
STEGOCEPHALUS ABYSSORUM. DELLA VALLE, 1893:629, PL. 59, FIG. 38.
ANDANIOTES CORPULENTUS. STEBBING, 1897:31, PL. 8.
ANDANIOTES CORPULENTUS. HUTTON, 1904:258.
ANDANIOTES CORPULENTA. CHEVREUX, 1906E:22.
ANDANIOTES CORPULENTUS. STEBBING, 1906:96, FIG. 21.
ANDANIOTES CORPULENTUS. CHILTON, 1921B:55.
ANDANIOTES CORPULENTUS. K.H.BARNARD, 1930:328.
ANDANIOTES CORPULENTUS. SCHELLENBERG, 1931:51.
ANDANIOTES CORPULENTUS. HURLEY, 1955:196, (KEY).
ANDANIOTES CORPULENTUS. J.L.BARNARD, 1958B:127.
NOT ANDANIOTES CORPULENTUS. STEBBING, 1910A:575, (=ANDANIOTES WALLAROO, J.L.BARNARD, 1972A).

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 140-150 M (AS).
MAGELLANIC AREA: CAPE VALENTINA, 270 M; BEAGLE CHANNEL, 100 M; CAPE BLANCO, 144 M; ULTIMA ESPERANZA, LOW TIDE; PUERTO CONDOR, 90 M (AS).
SOUTHERN OCEAN: ATLANTIC SECTOR, 53 34 S 43 23 W, 160 M (AS).
WILHELM ARCHIPELAGO: PORT CHARCOT, 20-40 M (EC).

DEPTH RANGE: LOW TIDE-270 M.

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

ANDANIOTES INGENS CHEVREUX

ANDANIOTES INGENS CHEVREUX, 1906E:22, FIGS. 12-14.
ANDANIOTES INGENS. NICHOLLS, 1938:40.
ANDANIOTES INGENS. J.L.BARNARD, 1958B:127.
ANDANIOTES INGENS. THURSTON, 1974B:70, FIG. 28A.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN).
MARGUERITE BAY: STONINGTON ISLAND, 64 M (MHT).
PALMER ARCHIPELAGO: PORT LOCKROY, LECUYER POINT, PELTIER CHANNEL, 18 M (MHT).
WILHELM ARCHIPELAGO: PORT CHARCOT, 20-40 M (EC).

DEPTH RANGE: 18-540 M.

ANDANIOTES LINEARIS K.H.BARNARD

ANDANIOTES LINEARIS K.H.BARNARD, 1932:80, FIG. 36.
ANDANIOTES LINEARIS. NICHOLLS, 1938:41, FIG. 21.
ANDANIOTES LINEARIS. J.L.BARNARD, 1958B:127.
ANDANIOTES LINEARIS. SANDERSON, 1973:44.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 81-90 M (GEN).
BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
PALMER ARCHIPELAGO: BISMARCK STRAIT, 90-130 M (KHB).
SOUTH GEORGIA: CUMBERLAND BAY, 120-204 M; CUMBERLAND EAST BAY, 179-235 M; STROMNESS HARBOUR, 155-178 M; OFF CAPE SAUNDERS, 132-148 M; 53 51 S 36 21 W, 200-236 M (KHB).

DEPTH RANGE: 81-236 M.

EUANDANIA GIGANTEA (STEBBING)

ANDANIA GIGANTEA STEBBING, 1883:206.
ANDANIA GIGANTEA. STEBBING, 1885:619, FIG. 207.
ANDANIA GIGANTEA. STEBBING, 1888:730, PL. 35.
STEGOCEPHALUS GIGANTEUS. DELLA VALLE, 1893:628, PL. 59, FIG. 37.
EUANDANIA GIGANTEA. STEBBING, 1899D:206.
EUANDANIA GIGANTEA. STEBBING, 1906:97.
? EUANDANIA GIGANTEA. WALKER, 1907:18.
EUANDANIA GIGANTEA. K.H.BARNARD, 1932:80.
EUANDANIA GIGANTEA. SHOEMAKER, 1945B:194.
EUANDANIA GIGANTEA. SCHELLENBERG, 1955:193.
EUANDANIA GIGANTEA. J.L.BARNARD, 1958B:127.
EUANDANIA GIGANTEA. BIRSTEIN AND VINOGRADOV, 1960:206,227,232,234.
EUANDANIA GIGANTEA. J.L.BARNARD, 1961:57.
EUANDANIA GIGANTEA. BIRSTEIN AND VINOGRADOV, 1962A:45.

DISTRIBUTION: PRINCE EDWARD ISLANDS: NEAR MARION ISLAND, 46 46 S 45 31 E, 2475 M, 46 16 S 48 27 E, 2880 M (TRRS).
ROSS SEA: WINTER QUARTERS BAY (AOW).
SOUTHERN OCEAN: INDIAN SECTOR, 59 29 S 90 07 E, 0-3195 M; PACIFIC SECTOR, 64 03 S 161 59 E, 0-3000 M; 66 03 S 160 08 W, 0-2200 M; 60 15 S 135 06 W, 0-2500 M (B&V).

DEPTH RANGE: 0-3195 M.

EXTRINSIC DISTRIBUTION: GULF OF GUINEA; KERMADEC TRENCH; SOUTH AFRICA; SOUTH AND NORTH-WEST ATLANTIC OCEANS.

PARANDANIA BOECKI (STEBBING)

ANDANIA BOECKI STEBBING, 1888:735, PL. 36.
STEGOCEPHALUS BOECKII. DELLA VALLE, 1893:628, PL. 59, FIG. 36.
PARANDANIA BOECKI. STEBBING, 1899D:206.
PARANDANIA BOECKI. CHEVREUX, 1905C:7.
PARANDANIA BOECKI. STEBBING, 1906:95, FIGS. 19,20.
PARANDANIA BOECKI. WALKER, 1909:330.
PARANDANIA BOECKI. K.H.BARNARD, 1916:131.
PARANDANIA BOECKI. SCHELLENBERG, 1926A:300.
PARANDANIA BOECKI. SCHELLENBERG, 1926B:223, FIG. 28C.
PARANDANIA BOECKII. PIRLOT, 1929:8.
PARANDANIA BOECKI. SCHELLENBERG, 1931:51.
PARANDANIA BOECKI. K.H.BARNARD, 1932:77, FIG. 35.
PARANDANIA BOECKI. STEPHENSEN, 1933:22,69.
PARANDANIA BOECKI. CHEVREUX, 1935:66.
PARANDANIA BOECKI. K.H.BARNARD, 1937:148.
PARANDANIA BOECKI. K.H.BARNARD, 1940:515.
PARANDANIA BOECKI. SHOEMAKER, 1945B:194.
PARANDANIA BOECKI. BIRSTEIN AND VINOGRADOV, 1955:239,279,284, FIG. 32, TABLE 3.
PARANDANIA BOECKI. SCHELLENBERG, 1955:193.
PARANDANIA BOECKI. J.L.BARNARD, 1958B:127.
PARANDANIA BOECKI. BIRSTEIN AND VINOGRADOV, 1958:238,250,252,253.
PARANDANIA BOECKI. BIRSTEIN AND VINOGRADOV, 1960:206,227,234.
PARANDANIA BOECKI. J.L.BARNARD, 1961:57, FIG. 27.
PARANDANIA BOECKI. BIRSTEIN AND VINOGRADOV, 1962A:45.
PARANDANIA BOECKI. GURJANOVA, 1962:382, FIG. 132.
PARANDANIA BOECKI. SANDERSON, 1973:44.
PARANDANIA BOECKI. GRIFFITHS, 1974C:323.

DISTRIBUTION: BOUVET ISLAND: 52 25 S 09 50 E, 1310-1410 M (KHB).
DRAKE PASSAGE: 58 11 S 61 00 W, 0-1000 M (B&V).
SOUTHERN OCEAN: ATLANTIC SECTOR, 52 25 S 09 50 E, 1310-1410 M (KHB); 55 20 S 05 16 E, 0-2000 M; 48 27 S 42 36 W, 0-2500 M; 49 56 S 49 56 W, 0-2700 M (AS); INDIAN SECTOR, 62 55 S 118 52 E, 0-3700 M (B&V); 55 27 S 28 59 E, 0-1000 M (AS); PACIFIC SECTOR, 60 15 S 135 06 W, 0-2500 M; 58 58 S 109 28 W, 2180 M; 55 18 S 109 20 W, 0-1200 M; 53 15 S 109 30 W, 0-500 M (B&V).
SOUTH GEORGIA: 53 25 S 35 15 W, 1025-1275 M (KHB).
SOUTH SHETLAND ISLANDS: OFF LIVINGSTON ISLAND, 0-800 M (KHB).

DEPTH RANGE: 0-3700 M.

EXTRINSIC DISTRIBUTION: COSMOPOLITAN.

PHIPPSIELLA KERGUELENI SCHELLENBERG

PHIPPSIELLA KERGUELENI SCHELLENBERG, 1926B:220, FIG. 14.
PHIPPSIELLA KERGUELENI. J.L.BARNARD, 1958B:127.
PHIPPSIELLA KERGUELENI. J.L.BARNARD, 1967B:145.

DISTRIBUTION: KERGUELEN ISLANDS: RHODES BAY, GAZELLE HARBOUR, 18 M (AS).

PHIPPSIELLA ROSTRATA K.H.BARNARD

PHIPPSIELLA ROSTRATA K.H.BARNARD, 1932:76, FIG. 33.
PHIPPSIELLA ROSTRATA. J.L.BARNARD, 1958B:127.
PHIPPSIELLA ROSTRATA. J.L.BARNARD, 1967B:146.

DISTRIBUTION: SOUTH GEORGIA: 53 48 S 35 57 W, 401-411 M (KHB).

PSEUDANDANIEXIS MIXTUS NICHOLLS

PARANDANIEXIS MIXTUS NICHOLLS, 1938:42, FIG. 22.
PSEUDANDANIEXIS MIXTUS NICHOLLS, 1938: CORRIGENDUM.
PSEUDANDANIEXIS MIXTUS. J.L.BARNARD, 1958B:127.
PSEUDANDANIEXIS MIXTUS. BELLAN-SANTINI, 1972A:229, PL. 36.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 590-720 M (GEN); GEOLOGIE ARCHIPELAGO, 60-75 M (DBS).

DEPTH RANGE: 60-720 M.

STEGOCEPHALOIDES VANHOFFENI SCHELLENBERG

STEGOCEPHALOIDES VANHOFFENI SCHELLENBERG, 1926A:299.
STEGOCEPHALOIDES VANHOFFENI. K.H.BARNARD, 1930:328, FIG. 6.
STEGOCEPHALOIDES VANHOFFENI. J.L.BARNARD, 1958B:127.
STEGOCEPHALOIDES VANHOFFENI. J.L.BARNARD, 1967B:148.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
OATES COAST: 329-366 M (KHB).

DEPTH RANGE: 329-385 M.

STEGOPHIPPSIELLA PACIS BELLAN-SANTINI AND LEDOYER

STEGOPHIPPSIELLA PACIS BELLAN-SANTINI AND LEDOYER, 1974:696, PLS. 35,36.

DISTRIBUTION: KERGUELEN ISLANDS: BOSSIERE FJORD, 1-2 M; MORBIHAN BAY, JOLIETTE COVE, 10-54 M (BS&L).

DEPTH RANGE: 1-54 M.

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STENOTHOIDAE

(=THAUMATELSONIDAE)

STENOTHOINAE

MESOPROBOLOIDES CORNUTA (SCHELLENBERG)

METOPELLA CORNUTA SCHELLENBERG, 1926A:316, FIG. 37.
MESOPROBOLOIDES CORNUTA. J.L.BARNARD, 1958B:128.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

MESOPROBOLOIDES SIMILIS (SCHELLENBERG)

METOPELLA SIMILIS SCHELLENBERG, 1926A:314, FIG. 36.
MESOPROBOLOIDES SIMILIS. J.L.BARNARD, 1958B:128.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

MESOPROBOLOIDES SPINOSUS BELLAN-SANTINI AND LEDOYER

MESOPROBOLOIDES SPINOSUS BELLAN-SANTINI AND LEDOYER, 1974:696, PL. 37A.

DISTRIBUTION: KERGUELEN ISLANDS: PORT AUX FRANCAIS, 1-3 M; MORBIHAN BAY, PENDER ISLAND, 50 M.

DEPTH RANGE: 1-50 M.

METOPA TUBERCULATA (SCHELLENBERG)

PROMETOPA TUBERCULATA SCHELLENBERG, 1926A:310, FIG. 35.
METOPA TUBERCULATA. J.L.BARNARD, 1958B:129.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

METOPOIDES CARINATUS SCHELLENBERG

METOPOIDES CARINATA SCHELLENBERG, 1931:101, FIG. 54.
PROBOLOIDES CARINATA. K.H.BARNARD, 1932:109,110, FIG. 59, (KEY).
PROBOLOIDES CARINATUS. RUFFO, 1949:13.
PROBOLOIDES CARINATA. J.L.BARNARD, 1958B:131.
METOPOIDES CARINATA. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND BAY, 75-310 M (AS), 120-250 M (KHB).

DEPTH RANGE: 75-310 M.

METOPOIDES CLAVATUS SCHELLENBERG

METOPOIDES CLAVATA SCHELLENBERG, 1931:103, FIG. 55.
PROBOLOIDES CLAVATUS. RUFFO, 1949:13.
PROBOLOIDES CLAVATA. J.L.BARNARD, 1958B:131.
METOPOIDES CLAVATA. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 250-310 M (AS).

DEPTH RANGE: 160-310 M.

METOPOIDES COMPACTUS (STEBBING)

METOPA COMPACTA STEBBING, 1888:767, PL. 45.
METOPA COMPACTA. DELLA VALLE, 1893:644.
METOPOIDES COMPACTUS. STEBBING, 1906:186, FIGS. 49,50.
METOPOIDES COMPACTA. SCHELLENBERG, 1931:96, FIG. 51.
PROBOLOIDES COMPACTUS. RUFFO, 1949:13.
PROBOLOIDES COMPACTA. J.L.BARNARD, 1958B:131.
METOPOIDES COMPACTA. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS); CAPE VALENTINA, 270 M (AS).
SOUTH GEORGIA: CUMBERLAND BAY, 252-310 M (AS).

DEPTH RANGE: 99-310 M.

METOPOIDES CRASSICORNIS SCHELLENBERG

METOPOIDES CRASSICORNIS SCHELLENBERG, 1931:98, FIG. 52.
PROBOLOIDES CRASSICORNIS. RUFFO, 1949:13.
PROBOLOIDES CRASSICORNIS. J.L.BARNARD, 1958B:131.
METOPOIDES CRASSICORNIS. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: FALKLAND ISLANDS: BERKELEY SOUND, 16 M; 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 140-150 M (AS).

DEPTH RANGE: 16-197 M.

METOPOIDES CRASSUS SCHELLENBERG

METOPOIDES CRASSA SCHELLENBERG, 1931:99, FIG. 53.
PROBOLOIDES CRASSUS. RUFFO, 1949:13.

PROBOLOIDES CRASSA. J.L.BARNARD, 1958B:131.
METOPOIDES CRASSA. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).

METOPOIDES CRENATIPALMATUS (STEBBING)

METOPA CRENATIPALMATA STEBBING, 1888:759, PL. 42.
PROBOLOIDES CRENATIPALMATUS. STEBBING, 1906:188.
PROBOLOIDES CRENATIPALMATUS. K.H.BARNARD, 1932:109,111, FIG. 60, (KEY).
PROBOLOIDES CRENATIPALMATUS. RUFFO, 1949:13.
PROBOLOIDES CRENATIPALMATUS. J.L.BARNARD, 1958B:131.
METOPOIDES CRENATIPALMATUS. J.L.BARNARD, 1969A:447, (BY IMPLICATION).
PROBOLOIDES CF. CRENATIPALMATUS. BELLAN-SANTINI, 1972A:231.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 70-90 M (DBS).
MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS).
SOUTH GEORGIA: CUMBERLAND BAY, 120-250 M; STROMNESS HARBOUR, 122-178 M; 53 51 S 36 18 W, 245 M (KHB).

DEPTH RANGE: 70-250 M.

EXTRINSIC DISTRIBUTION: TRISTAN DA CUNHA.

METOPOIDES HETEROSTYLIS SCHELLENBERG

METOPOIDES HETEROSTYLIS SCHELLENBERG, 1926A:320, FIG. 39.
METOPOIDES HETEROSTYLIS. NICHOLLS, 1938:48, FIG. 25.
PROBOLOIDES HETEROSTYLIS. RUFFO, 1949:13.
PROBOLOIDES HETEROSTYLIS. J.L.BARNARD, 1958B:131.
METOPOIDES HETEROSTYLIS. J.L.BARNARD, 1969A:447, (BY IMPLICATION).
METOPOIDES HETEROSTYLIS. BELLAN-SANTINI, 1972A:231.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45 M (GEN); GEOLOGIE ARCHIPELAGO, 31 M (DBS).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).

DEPTH RANGE: 31-385 M.

METOPOIDES LONGICORNIS SCHELLENBERG

METOPOIDES LONGICORNIS SCHELLENBERG, 1931:105, FIG. 56.
PROBOLOIDES LONGICORNIS. RUFFO, 1949:13.
PROBOLOIDES LONGICORNIS. J.L.BARNARD, 1958B:131.
METOPOIDES LONGICORNIS. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: BURDWOOD BANK: 53 45 S 61 10 W, 140-150 M (AS).
FALKLAND ISLANDS: BERKELEY SOUND, 16 M (AS).

DEPTH RANGE: 16-150 M.

METOPOIDES MACROCHEIR SCHELLENBERG

METOPOIDES MACROCHEIR SCHELLENBERG, 1926A:318, FIG. 38.
PROBOLOIDES MACROCHEIR. RUFFO, 1949:13.
PROBOLOIDES MACROCHEIR. J.L.BARNARD, 1958B:131.
METOPOIDES MACROCHEIR. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

METOPOIDES MAGELLANICUS (STEBBING)

METOPA MAGELLANICA STEBBING, 1888:756, PL. 41.
METOPA MAGELLANICA. DELLA VALLE, 1893:644.
METOPOIDES MAGELLANICUS. STEBBING, 1906:185.
METOPOIDES MAGELLANICA. SCHELLENBERG, 1931:96.
PROBOLOIDES MAGELLANICUS. RUFFO, 1949:13.
PROBOLOIDES MAGELLANICA. J.L.BARNARD, 1958B:131.
METOPOIDES MAGELLANICA. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS); 55 10 S 66 15 W, 100 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 30-95 M (AS).

DEPTH RANGE: 30-100 M.

METOPOIDES PALMATUS (RUFFO)

PROBOLOIDES PALMATUS RUFFO, 1949:17, FIGS. 2,3.
PROBOLOIDES PALMATUS. J.L.BARNARD, 1958B:131.
METOPOIDES PALMATUS. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: BELLINGSHAUSEN SEA: 71 19 S 87 37 W (SR).

METOPOIDES PARALLELOCHEIR (STEBBING)

METOPA PARALLELOCHEIR STEBBING, 1888:762, PL. 43.
METOPA PARALLELOCHEIR. DELLA VALLE, 1893:642, PL. 59, FIG. 59.
METOPOIDES PARALLELOCHEIR. STEBBING, 1906:186.
METOPOIDES PARALLELOCHEIR. SCHELLENBERG, 1931:96.
METOPOIDES PARALLELOCHEIR. K.H.BARNARD, 1932:108.
PROBOLOIDES PARALLELOCHEIR. RUFFO, 1949:13.
PROBOLOIDES PARALLELOCHEIR. J.L.BARNARD, 1958B:131.
METOPOIDES PARALLELOCHEIR. J.L.BARNARD, 1969A:447, (BY IMPLICATION).

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).
MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 67 39 W, 99 M (TRRS).
SOUTH GEORGIA: CUMBERLAND EAST BAY, 38 M (KHB).

DEPTH RANGE: 38-197 M.

METOPOIDES SARSII (PFEFFER)

METOPA SARSII PFEFFER, 1888:84, PL. 2, FIGS. 3,8, PL. 3, FIG. 2.
METOPA SARSII. DELLA VALLE, 1893:645.
PROBOLOIDES SARSII. STEBBING, 1906:190.
METOPOIDES WALKERI CHEVREUX, 1906A:37, FIG. 1.
METOPOIDES WALKERI. CHEVREUX, 1906E:28, FIGS. 15-17.
METOPOIDES SARSII. CHILTON, 1912:479, PL. 1, FIG. 10.
METOPOIDES WALKERI. CHEVREUX, 1913:109.
METOPOIDES SARSI. CHILTON, 1913:55.
METOPOIDES SARSII. SCHELLENBERG, 1931:96.
METOPOIDES SARSI. STEPHENSEN, 1947:46.
PROBOLOIDES SARSII. RUFFO, 1949:13.
PROBOLOIDES SARSI. J.L.BARNARD, 1958B:131.
METOPOIDES SARSI. J.L.BARNARD, 1969A:447, (BY IMPLICATION).
METOPOIDES SARSII. BELLAN-SANTINI AND LEDOYER, 1974:696, PL. 38A.
PROBOLOIDES SARSI. THURSTON, 1974A:27.
METOPOIDES SARSI. THURSTON, 1974B:71.
NOT METOPOIDES ? SARSII. STEPHENSEN, 1947:46, FIG. 18, (=PROBOLOIDES SPECIES).

DISTRIBUTION: CROZET ISLANDS: POSSESSION ISLAND, NAVIRE BAY (BS&L).
PALMER ARCHIPELAGO: PORT LOCKROY, 20-30 M (KS), GOUDIER ISLAND, 1 M (MHT).
SOUTH GEORGIA: (GP); CUMBERLAND BAY, 1-2 M; OFF GRYTVIKEN, 12-15 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, SHORE (CC); SIGNY ISLAND, BORGE BAY, LITTORAL-20 M (MHT).
TRINITY PENINSULA: HOPE BAY, 37-55 M, GRUNDEN ROCK, LOW TIDE (MHT).
WILHELM ARCHIPELAGO: BOOTH ISLAND; PETERMANN ISLAND, 3 M (EC).

DEPTH RANGE: LITTORAL-30 M.

METOPOIDES SPECIES

METOPOIDES SP. BELLAN-SANTINI AND LEDOYER, 1974:698, PL. 38B.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, 15 M, KARL LUYKEN SOUND, 30 M, PORT DOUZIEME, LITTORAL; BOSSIERE FJORD, 0-5 M.

DEPTH RANGE: 0-30 M.

PROBOLISCA ELLIPTICA (SCHELLENBERG)

METOPELLA ELLIPTICA SHELLENBERG, 1931:108, FIGS. 58,59.
PROBOLISCA ELLIPTICA. J.L.BARNARD, 1958B:130.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 18-40 M; PORT WILLIAM, 22 M (AS).
MAGELLANIC AREA: BEAGLE CHANNEL, 55 10 S 66 15 W, 100 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 24-52 M (AS).

DEPTH RANGE: 18-100 M.

PROBOLISCA NASUTIGENES (STEBBING)

METOPA NASUTIGENES STEBBING, 1888:753, PL. 40.
METOPA NASUTA. DELLA VALLE, 1893:637, (IN PART).
METOPELLA NASUTIGENES. STEBBING, 1906:183.
METOPELLA NASUTIGENES. J.L.BARNARD, 1958B:130.
PROBOLISCA NASUTIGENES. J.L.BARNARD, 1962C:142.
PROBOLISCA NASUTIGENES. J.L.BARNARD, 1964C:70.
PROBOLISCA NASUTIGENES. J.L.BARNARD, 1969A:447.
PROBOLISCA NASUTIGENES. BELLAN-SANTINI AND LEDOYER, 1974:698.

DISTRIBUTION: KERGUELEN ISLANDS: CUMBERLAND BAY, 229 M (TRRS); MORBIHAN BAY, PENDER ISLAND, 50 M (BS&L).

DEPTH RANGE: 50-229 M.

PROBOLISCA OVATA (STEBBING)

METOPA OVATA STEBBING, 1888:764, PL. 44.
METOPA OVATA. DELLA VALLE, 1893:645.
METOPELLA OVATA. STEBBING, 1906:183, FIGS. 47,48.
METOPELLA OVATA. CHILTON, 1912:481.
METOPELLA OVATUS. STEBBING, 1914:358.
? METOPELLA OVATA. CHILTON, 1923A:241, (QUESTIONED BY J.L.BARNARD, 1972C).
METOPELLA OVATA. SCHELLENBERG, 1926A:313, (IN PART).
METOPELLA OVATA. SCHELLENBERG, 1926B:195.
METOPELLA OVATA. STEPHENSEN, 1927:309.
METOPELLA OVATA. SCHELLENBERG, 1931:108.
METOPELLA OVATA. K.H.BARNARD, 1932:108.
PROBOLISCA OVATA. GURJANOVA, 1938:279,388.
METOPELLA OVATA. NICHOLLS, 1938:48.
METOPELLA OVATA. STEPHENSEN, 1938:237.
METOPELLA OVATA. STEPHENSEN, 1947:46.
PROBOLISCA OVATA. GURJANOVA, 1948:323.
PROBOLISCA OVATA. J.L.BARNARD, 1958B:130.
PROBOLISCA OVATA. J.L.BARNARD, 1972C:30,155, FIGS. 89F-J, (KEY).
PROBOLISCA OVATA. BELLAN-SANTINI AND LEDOYER, 1974:698.
PROBOLISCA OVATA. LOWRY, 1974:127.
PROBOLISCA OVATA. THURSTON, 1974A:26, FIGS. 8C-J.
PROBOLISCA OVATA. THURSTON, 1974B:71.

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR, SHORE (KS).
FALKLAND ISLANDS: STANLEY HARBOUR, LOW TIDE (TRRS); 52 29 S 60 36 W, 197 M; 53 45 S 61 10 W, 140-150 M (AS).
KERGUELEN ISLANDS: OBSERVATORY BAY; THREE ISLAND HARBOUR (AS); MORBIHAN BAY, 15 M, PORT JEANNE-D'ARC, CHAT ISLAND, BOSSIERE FJORD, 10-15 M, PENDER ISLAND, 50 M, LABOUREUR SOUND, 10-35 M, PORT DOUZIEME, LITTORAL (BS&L).
MACQUARIE ISLAND: (GEN).
MAGELLANIC AREA: CAPE VIRGENES, 52 20 S 69 39 W, 99 M (TRRS); MAGELLAN SOUND; USHUAIA BAY, 4 M (AS).
PALMER ARCHIPELAGO: PORT LOCKROY, LOW TIDE, GOUDIER ISLAND, LOW TIDE-1 M (MHT).
SOUTH GEORGIA: CUMBERLAND BAY, 1-2 M; OFF GRYTVIKEN, 1-20 M (AS); CUMBERLAND EAST BAY, 11-235 M (KHB); CUMBERLAND WEST BAY, JASON HARBOUR, 10-21 M (KS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 4-18 M (CC); NORMANNA STRAIT, 24-36 M (KHB); SIGNY ISLAND, BORGE BAY, LITTORAL-20 M, PAAL HARBOUR, 5-25 M; ELEPHANT FLATS, LITTORAL (MHT).
SOUTH SHETLAND ISLANDS: DECEPTION ISLAND, 25-75 M (KS).
TRINITY PENINSULA: HOPE BAY, GRUNDEN ROCK, LITTORAL (MHT).

DEPTH RANGE: LITTORAL-235 M.

EXTRINSIC DISTRIBUTION: NEW ZEALAND; NORTHERN ARGENTINA.

PROBOLOIDES ANTARCTICUS WALKER

PROBOLOIDES ANTARCTICUS WALKER, 1906B:13.
PROBOLOIDES ANTARCTICUS. WALKER, 1907:18, PL. 5, FIG. 9.
PROBOLOIDES ANTARCTICUS. K.H.BARNARD, 1932:109,110, FIG. 58, (KEY).
PROBOLOIDES ANTARCTICUS. RUFFO, 1949:13.
PROBOLOIDES ANTARCTICUS. J.L.BARNARD, 1958B:131.

DISTRIBUTION: ROSS SEA: WINTER QUARTERS BAY, HUT POINT (AOW).
SOUTH SHETLAND ISLANDS: KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

PROBOLOIDES AURORAE (NICHOLLS)

METOPOIDES AURORAE NICHOLLS, 1938:49, FIG. 26.
PROBOLOIDES AURORAE. RUFFO, 1949:13.
PROBOLOIDES AURORAE. J.L.BARNARD, 1958B:131.
PROBOLOIDES AURORAE. J.L.BARNARD, 1972C:157.

DISTRIBUTION: MACQUARIE ISLAND: NORTH END (GEN).

PROBOLOIDES CURVIPES (SCHELLENBERG)

METOPOIDES CURVIPES SCHELLENBERG, 1926A:322, FIG. 40.
PROBOLOIDES CURVIPES. RUFFO, 1949:13.
PROBOLOIDES CURVIPES. J.L.BARNARD, 1958B:131.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).

PROBOLOIDES DENTIMANUS NICHOLLS

PROBOLOIDES DENTIMANUS NICHOLLS, 1938:51, FIG. 27.
PROBOLOIDES DENTIMANUS. RUFFO, 1949:13.
PROBOLOIDES DENTIMANUS. J.L.BARNARD, 1958B:131.
METOPOIDES DENTIMANUS. J.L.BARNARD, 1969A:447, (BY IMPLICATION).
PROBOLOIDES DENTIMANUS. BELLAN-SANTINI, 1972A:232, PL. 37.
PROBOLOIDES DENTIMANUS. BELLAN-SANTINI, 1972B:699.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 518-540 M (GEN); GEOLOGIE ARCHIPELAGO, 10-50 M; CAPE GEODESIE, 180-200 M (DBS).

DEPTH RANGE: 10-540 M.

PROBOLOIDES ELLIPTICUS (SCHELLENBERG)

METOPOIDES ELLIPTICA SCHELLENBERG, 1931:106, FIG. 57.
PROBOLOIDES ELLIPTICUS. RUFFO, 1949:13.
PROBOLOIDES ELLIPTICA. J.L.BARNARD, 1958B:131.

DISTRIBUTION: SOUTH GEORGIA: OFF GRYTVIKEN, 24-52 M (AS).

PROBOLOIDES PERLATUS K.H.BARNARD

PROBOLOIDES PERLATUS K.H.BARNARD, 1930:339, FIG. 15.
PROBOLOIDES PERLATUS. K.H.BARNARD, 1932:109, (KEY).
PROBOLOIDES PERLATUS. RUFFO, 1949:13.
PROBOLOIDES PERLATUS. J.L.BARNARD, 1958B:131.

DISTRIBUTION: ROSS SEA: OFF CAPE ADARE, 82-92 M (KHB).

PROBOLOIDES PORCELLANUS K.H.BARNARD

PROBOLOIDES PORCELLANUS K.H.BARNARD, 1932:109,111, FIG. 61, (KEY).
PROBOLOIDES PORCELLANUS. RUFFO, 1949:13.
PROBOLOIDES PORCELLANUS. J.L.BARNARD, 1958B:131.

DISTRIBUTION: FALKLAND ISLANDS: EAST FALKLAND ISLAND, OFF EDDYSTONE ROCK, 105-115 M (KHB).

PROBOLOIDES STEPHENSENI RUFFO

PROBOLOIDES STEPHENSENI RUFFO, 1949:15, FIGS. 1-3.
PROBOLOIDES STEPHENSENI. J.L.BARNARD, 1958B:131.

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 23 S 82 47 W (SR).

PROBOLOIDES TYPICUS (WALKER)

PROBOLIELLA TYPICA WALKER, 1906B:14.
PROBOLIELLA TYPICA. WALKER, 1907:20, PL. 6, FIG. 10.
PROBOLOIDES TYPICA. SCHELLENBERG, 1926A:323, FIG. 41.

PROBOLOIDES TYPICA. K.H.BARNARD, 1930:339.
PROBOLOIDES TYPICA. K.H.BARNARD, 1932:109, FIG. 57, (KEY).
PROBOLOIDES TYPICUS. RUFFO, 1949:13.
PROBOLOIDES TYPICA. J.L.BARNARD, 1958B:131.

DISTRIBUTION: DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: WINTER QUARTERS BAY, HUT POINT (AOW); MCMURDO SOUND, 457 M (KHB).
SHAG ROCKS: 53 43 S 40 57 W, 177 M (KHB).
SOUTH GEORGIA: CUMBERLAND BAY, 120-250 M; STROMNESS HARBOUR, 155-178 M; 53 51 S 36 18 W, 245 M (KHB).

DEPTH RANGE: 120-457 M.

PROBOLOIDES SPECIES

METOPOIDES ? SARSII. STEPHENSEN, 1947:46, FIG. 18.

DISTRIBUTION: CROZET ISLANDS: 1-6 M (KS).

STENOTHOE AUCKLANDICUS STEPHENSEN

STENOTHOE AUCKLANDICUS STEPHENSEN, 1927:311, FIG. 8.
STENOTHOE AUCKLANDICUS. J.L.BARNARD, 1953:86.
STENOTHOE AUCKLANDICA. J.L.BARNARD, 1958B:132.
STENOTHOE AUCKLANDICUS. J.L.BARNARD, 1972C:157.

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, LOW TIDE, MASKED ISLAND, ROCKY COAST (KS).

STENOTHOE AUCKLANDICUS FALKLANDICUS SCHELLENBERG

STENOTHOE AUCKLANDICA FALKLANDICA SCHELLENBERG, 1931:113, FIG. 61.

DISTRIBUTION: FALKLAND ISLANDS: PORT ALBEMARLE, 15 M; BERKELEY SOUND, 16 M; PORT WILLIAM, 40 M (AS).

DEPTH RANGE: 15-40 M.

THAUMATELSONINAE

ANTATELSON ANTENNATUM BELLAN-SANTINI AND LEDOYER

ANTATELSON ANTENNATUM BELLAN-SANTINI AND LEDOYER, 1974:701, PL. 39.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, CHAT ISLAND (BS&L).

ANTATELSON CULTRICAUDA (K.H.BARNARD)

THAUMATELSON CULTRICAUDA K.H.BARNARD, 1932:113, FIG. 62.
THAUMATELSON CULTRICAUDA. J.L.BARNARD, 1958B:138.
THAUMATELSON CULTRICAUDA. J.L.BARNARD, 1962C:133.
ANTATELSON CULTRICAUDA. J.L.BARNARD, 1972A:312.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND EAST BAY, 38 M (KHB).

ANTATELSON ROSTRATUM BELLAN-SANTINI AND LEDOYER

ANTATELSON ROSTRATUM BELLAN-SANTINI AND LEDOYER, 1974:701, PL. 37B.

DISTRIBUTION: KERGUELEN ISLANDS: MORBIHAN BAY, CHAT ISLAND (BS&L).

ANTATELSON WALKERI (CHILTON)

THAUMATELSON WALKERI CHILTON, 1912:481, PL. 1, FIGS. 11-15.
THAUMATELSON WALKERI. SCHELLENBERG, 1931:113.
THAUMATELSON WALKERI. J.L.BARNARD, 1958B:138.
ANTATELSON WALKERI. J.L.BARNARD, 1972A:312.
THAUMATELSON WALKERI. THURSTON, 1974A:24.
ANTATELSON WALKERI. THURSTON, 1974B:71.

DISTRIBUTION: BRANSFIELD STRAIT: 63 09 S 58 17 W, 95 M (AS).
PALMER ARCHIPELAGO: PORT LOCKROY, LOW TIDE, GOUDIER ISLAND, 1 M (MHT).
SHAG ROCKS: 53 34 S 43 23 W, 160 M (AS).
SOUTH GEORGIA: OFF GRYTVIKEN, 20 M; CUMBERLAND BAY, 75 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC); SIGNY ISLAND, BORGE BAY, 2-20 M, PAAL HARBOUR, 5-15 M (MHT).
TRINTIY PENINSULA: 64 20 S 56 38 W, 150-200 M (AS).

DEPTH RANGE: LOW TIDE-200 M.

PARATHAUMATELSON NASICUM (STEPHENSEN)

METOPELLA NASICA STEPHENSEN, 1927:309, FIG. 7.
PSEUDOTHAUMATELSON NASICA. SCHELLENBERG, 1931:110.
PARATHAUMATELSON NASICA. GURJANOVA, 1938:387.
PARATHAUMATELSON NASICA. J.L.BARNARD, 1958B:138.
PSEUDOTHAUMATELSON NASICA. J.L.BARNARD, 1964C:71.
PARATHAUMATELSON NASICA. J.L.BARNARD, 1972A:311.
PARATHAUMATELSON NASICUM. J.L.BARNARD, 1972C:30,158, FIG. 90, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: CARNLEY HARBOUR, LOW TIDE, MASKED ISLAND, ROCKY COAST (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

PROTHAUMATELSON NASUTUM (CHEVREUX)

THAUMATELSON NASUTUM CHEVREUX, 1912:212.
? THAUMATELSON INERMIS CHILTON, 1912:483, PL. 1, FIGS. 16,17, (QUESTIONED BY SCHELLENBERG, 1931).
THAUMATELSON NASUTUM. CHEVREUX, 1913:109, FIGS. 16-18.
PROTHAUMATELSON NASUTUM. SCHELLENBERG, 1931:113.
THAUMATELSON NASUTUM. K.H.BARNARD, 1932:112.
PROTHAUMATELSON NASUTUM. J.L.BARNARD, 1958B:138.
PROTHAUMATELSON NASUTUM. J.L.BARNARD, 1962C:133.
PROTHAUMATELSON NASUTUM. J.L.BARNARD, 1972A:311.
PROTHAUMATELSON NASUTUM. THURSTON, 1974A:25.
PROTHAUMATELSON NASUTUM. THURSTON, 1974B:71.

DISTRIBUTION: PALMER ARCHIPELAGO: PORT LOCKROY, LOW TIDE (MHT).
SOUTH GEORGIA: OFF GRYTVIKEN, 1-30 M; MORAINE FJORD, 16 M (AS); CUMBERLAND EAST BAY, 11-40 M (KHB).
SOUTH ORKNEY ISLANDS: SCOTIA BAY, 16-18 M (CC); SIGNY ISLAND, BORGE BAY, 5-15 M, PAAL HARBOUR, 5-15 M (MHT).
WILHELM ARCHIPELAGO: PETERMANN ISLAND, 3 M (EC).

DEPTH RANGE: LOW TIDE-40 M.

PSEUDOTHAUMATELSON CYPROIDES NICHOLLS

PSEUDOTHAUMATELSON CYPROIDES NICHOLLS, 1938:53, FIG. 28.
PSEUDOTHAUMATELSON CYPROIDES. J.L.BARNARD, 1958B:138.
PSEUDOTHAUMATELSON CYPROIDES. J.L.BARNARD, 1972A:312.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45 M (GEN).

PSEUDOTHAUMATELSON PATAGONICUM SCHELLENBERG

PSEUDOTHAUMATELSON PATAGONICUM SCHELLENBERG, 1931:110, FIG. 60.
PSEUDOTHAUMATELSON PATAGONICUM. J.L.BARNARD, 1958B:138.
PSEUDOTHAUMATELSON PATAGONICUM. J.L.BARNARD, 1972A:312.

DISTRIBUTION: FALKLAND ISLANDS: 52 29 S 60 36 W, 197 M (AS).

THAUMATELSON HERDMANI WALKER

THAUMATELSON HERDMANI WALKER, 1906B:15.
THAUMATELSON HERDMANI. WALKER, 1907:21, PL. 7, FIG. 11.
THAUMATELSON HERDMANI. CHILTON, 1912:484.
THAUMATOTELSON HERDMANI. SCHELLENBERG, 1926A:324.
THAUMATELSON HERDMANI. SCHELLENBERG, 1931:112.
THAUMATELSON HERDMANI. J.L.BARNARD, 1958B:138.
THAUMATELSON HERDMANI. J.L.BARNARD, 1972A:311.
THAUMATELSON HERDMANI. BELLAN-SANTINI, 1972A:232.
THAUMATELSON HERDMANI. THURSTON, 1974A:25.

DISTRIBUTION: ADELIE COAST: GEOLOGIE ARCHIPELAGO, 6-26 M (DBS).
BURDWOOD BANK: 53 45 S 61 10 W, 140-150 M (AS).
DAVIS SEA: 'GAUSS STATION', 385 M (AS).
ROSS SEA: WINTER QUARTERS BAY, HUT POINT (AOW).
SOUTH GEORGIA: CUMBERLAND BAY, 75 M; OFF GRYTVIKEN, 12-50 M (AS).
SOUTH ORKNEY ISLANDS: SCOTIA BAY (CC); SIGNY ISLAND, BORGE BAY, 3-20 M (MHT).
TRINITY PENINSULA: SNOW HILL ISLAND, 125 M (AS).

DEPTH RANGE: 3-385 M.

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STILIPEDIDAE

ALEXANDRELLA DENTATA CHEVREUX

ALEXANDRELLA DENTATA CHEVREUX, 1912:213.
ALEXANDRELLA DENTATA. CHEVREUX, 1913:134, FIGS. 31-33.
ALEXANDRELLA DENTATA. J.L.BARNARD, 1958B:133.
ALEXANDRELLA DENTATA. J.L.BARNARD, 1961:77, FIG. 46.

DISTRIBUTION: ALEXANDER ISLAND: 297 M (EC).

EXTRINSIC DISTRIBUTION: GREAT AUSTRALIAN BIGHT.

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SYNOPIIDAE

(=TIRONIDAE)

BRUZELIA POTON J.L.BARNARD

BRUZELIA POTON J.L.BARNARD, 1972B:18,27, FIG. 9, (KEY).

DISTRIBUTION: SOUTHERN OCEAN: ATLANTIC SECTOR, 55 03 S 58 57 W, 2452 M (JLB).

SYRRHOE NODULOSA K.H.BARNARD

SYRRHOE NODULOSA K.H.BARNARD, 1932:150, FIG. 88.
SYRRHOE NODULOSA. RUFFO, 1949:28, FIGS. 8,9.
SYRRHOE NODULOSA. J.L.BARNARD, 1958B:139.
SYRRHOE NODULOSA. J.L.BARNARD, 1972B:52,54, (KEY).

DISTRIBUTION: BELLINGSHAUSEN SEA: 71 18 S 88 02 W; 71 19 S 87 37 W (SR).
PALMER ARCHIPELAGO: SCHOLLAERT CHANNEL, 160-500 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M; KING GEORGE ISLAND, ADMIRALTY BAY, 62 07 S 58 28 W, 391 M (KHB).

DEPTH RANGE: 160-500 M.

SYRRHOE PSYCHROPHILA MONOD

SYRRHOE CRENULATA VAR. PSYCHROPHILA MONOD, 1926:54, FIG. 52.
SYRRHOE PSYCHROPHILA. SCHELLENBERG, 1931:159, FIG. 83.
SYRRHOE PSYCHROPHILA. K.H.BARNARD, 1932:149, FIG. 87.
SYRRHOE PSYCHROPHILA. RUFFO, 1949:28.
SYRRHOE PSYCHROPHILA. J.L.BARNARD, 1958B:139.
SYRRHOE PSYCHROPHILA. J.L.BARNARD, 1972B:52,56, (KEY).

DISTRIBUTION: BELLINGSHAUSEN SEA: 70 48 S 91 54 W, 400 M; 71 19 S 87 37 W, 400 M (TM); 70 48 S 91 54 W; 71 18 S 88 02 W (SR).
SOUTH GEORGIA: CUMBERLAND BAY, 250-300 M (AS); OFF 'JASON LIGHT', 238-270 M; STROMNESS HARBOUR, 122-178 M; 53 51 S 36 21 W, 200-236 M (KHB).

DEPTH RANGE: 122-400 M.

SYRRHOE TUBERCULATA DAHL

SYRRHOE TUBERCULATA DAHL, 1954:290, FIGS. 36-41.
SYRRHOE TUBERCULATA. J.L.BARNARD, 1958B:139.
SYRRHOE TUBERCULATA. J.L.BARNARD, 1972B:52,64, (KEY).

DISTRIBUTION: ROSS SEA: 'DISCOVERY INLET', 550 M (ED).

SYRRHOITES ANATICAUDA K.H.BARNARD

SYRRHOITES ANATICAUDA K.H.BARNARD, 1930:367, FIG. 37.
SYRRHOITES ANATICAUDA. K.H.BARNARD, 1932:151, FIG. 89.
SYRRHOITES ANATICAUDA. J.L.BARNARD, 1958B:139.
SYRRHOITES ANATICAUDA. J.L.BARNARD, 1964B:26,31, (KEY).
SYRRHOITES ANATICAUDA. J.L.BARNARD, 1967B:173, (KEY).
SYRRHOITES ANATICAUDA. J.L.BARNARD, 1969A:462.
SYRRHOITES ANATICAUDA. J.L.BARNARD, 1972B:65, (KEY).

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
ROSS SEA: MCMURDO SOUND, 205 M (KHB).
SOUTH SHETLAND ISLANDS: CLARENCE ISLAND, CAPE BOWLES, 61 25 S 53 46 W, 342 M (KHB).

DEPTH RANGE: 200-342 M.

SYRRHOITES SORPRESA (J.L.BARNARD)

KINDIA SORPRESA J.L.BARNARD, 1962D:57, FIG. 48, TABLE 9, (KEY).
SYRRHOITES SORPRESA. J.L.BARNARD, 1964B:26,31, (KEY).
SYRRHOITES SORPRESA. J.L.BARNARD, 1967B:172,185, (KEY).
SYRRHOITES SORPRESA. J.L.BARNARD, 1969A:462.
SYRRHOITES SORPRESA. J.L.BARNARD, 1972B:65,76, FIGS. 40,41, (KEY).

DISTRIBUTION: DRAKE PASSAGE: 61 09 S 67 51 W, 3867-4086 M (JLB).

EXTRINSIC DISTRIBUTION: CAPE BASIN.

TIRON ANTARCTICUS K.H.BARNARD

TIRON ANTARCTICUS K.H.BARNARD, 1932:148, FIG. 86.
TIRON ANTARCTICUS. J.L.BARNARD, 1958B:139.
TIRON ANTARCTICUS. J.L.BARNARD, 1972B:84.

DISTRIBUTION: BRANSFIELD STRAIT: 63 17 S 59 48 W, 200 M (KHB).
SOUTH GEORGIA: 54 59 S 35 24 W, 130 M (KHB).

DEPTH RANGE: 130-200 M.

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TALITRIDAE

HYALINAE

ALLORCHESTES COMPRESSA DANA

ALLORCHESTES COMPRESSA DANA, 1852:205.
ALLORCHESTES AUSTRALIS DANA, 1852:206.
ALLORCHESTES GAIMARDII DANA, 1853-55:884, PL. 60, FIG. 1.
ALLORCHESTES AUSTRALIS. DANA, 1853-55:892, PL. 60, FIG. 7.
ALLORCHESTES GAIMARDII. BATE, 1862:41, PL. 6, FIG. 9.
ALLORCHESTES AUSTRALIS. BATE, 1862:45, PL. 7, FIG. 6.
ASPIDOPHOREIA DIEMENENSIS HASWELL, 1881:101, PL. 6, FIG. 2.
HYALE PREVOSTII. DELLA VALLE, 1893:519, (IN PART).
HYALE PONTICA. DELLA VALLE, 1893:523,528,530, (IN PART).
ALLORCHESTES COMPRESSUS. STEBBING, 1899C:410, PL. 33B.
ALLORCHESTES COMPRESSUS. STEBBING, 1906:581.
ALLORCHESTES COMPRESSUS. STEBBING, 1910A:647.
? ALLORCHESTES COMPRESSUS. STEPHENSEN, 1927:351, (QUESTIONED BY J.L.BARNARD, 1972C,1974A).
? ALLORCHESTES COMPRESSUS. STEPHENSEN, 1938:261, (QUESTIONED BY J.L.BARNARD, 1972C).
ALLORCHESTES COMPRESSUS. HURLEY, 1957A:927.

ALLORCHESTES COMPRESSUS. HURLEY, 1957A:927.
ALLORCHESTES COMPRESSUS. J.L.BARNARD, 1958B:80.
ALLORCHESTES COMPRESSA. J.L.BARNARD, 1972C:167.
ALLORCHESTES COMPRESSA. J.L.BARNARD, 1974A:43, FIGS. 29-32.

DISTRIBUTION: AUCKLAND ISLANDS: PORT ROSS, SHORE (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR (KS).

EXTRINSIC DISTRIBUTION: AUSTRALIA.

ALLORCHESTES NOVIZEALANDIAE DANA

ALLORCHESTES NOVI-ZEALANDIAE DANA, 1852:207.
ALLORCHESTES INTREPIDA DANA, 1852:207.
ALLORCHESTES NOVI-ZEALANDIAE. DANA, 1853-55:894, PL. 61, FIG. 1.
ALLORCHESTES NOVAE-ZEALANDIAE. BATE, 1862:37, PL. 6, FIG. 3.
ALLORCHESTES NOVAE-ZEALANDIAE. MIERS, 1876:125.
ALLORCHESTES NEO-ZELANICA. THOMSON AND CHILTON, 1886:144.
? ALLORCHESTES NEO-ZEALANICA. THOMSON, 1889:260, PL. 13, FIG. 3,
(QUESTIONED BY J.L.BARNARD, 1972C).
HYALE PREVOSTII. DELLA VALLE, 1893:519, (IN PART).
HYALE PREVOSTII. THOMSON, 1899:204, (IN PART).
HYALE CHILTONI THOMSON, 1889:206.
ALLORCHESTES NOVIZEALANDIAE. STEBBING, 1906:581.
ALLORCHESTES NOVIZEALANDIAE. WALKER, 1908:38.
ALLORCHESTES NOVAE-ZEALANDIAE. CHILTON, 1909A:645.
HYALE CHILTONI. THOMSON, 1913:245.
ALLORCHESTES NOVIZEALANDIAE. CHILTON, 1926:517, FIGS. 3,4.
ALLORCHESTES NOVIZEALANDIAE. STEPHENSEN, 1938:261.
ALLORCHESTES NOVIZEALANDIAE. HURLEY, 1957A:927, FIGS. 147-169.
ALLORCHESTES NOVIZEALANDIAE. J.L.BARNARD, 1958B:80.
ALLORCHESTES NOVIZEALANDIAE. J.L.BARNARD, 1972C:30,167, (KEY).
ALLORCHESTES NOVIZEALANDIAE. J.L.BARNARD, 1974A:49.
ALLORCHESTES NOVIZEALANDIAE. LOWRY, 1974:120,128, FIGS. 12E,F, (KEY).

DISTRIBUTION: AUCKLAND ISLANDS: EWING ISLAND; ENDERBY ISLAND (CC), (AOW).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

ALLORCHESTES SPECIES

ALLORCHESTES SP. STEPHENSEN, 1938:261.

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR, 42 M (KS).

EXTRINSIC DISTRIBUTION: NEW ZEALAND.

HYALE CAMPBELLICA (FILHOL)

ALLORCHESTES CAMPBELLICA FILHOL, 1885:466.
HYALE CAMPBELLICA. STEBBING, 1906:562.
HYALE CAMPBELLICA. CHILTON, 1909A:644.
HYALE CAMPBELLICA. RUFFO, 1950:58.
HYALE CAMPBELLICA. HURLEY, 1957A:903,909, (KEY).
HYALE CAMPBELLICA. J.L.BARNARD, 1958B:81.
HYALE CAMPBELLICA. J.L.BARNARD, 1972C:167.

DISTRIBUTION: CAMPBELL ISLAND: PERSEVERANCE HARBOUR (HF).

HYALE GRANDICORNIS (KROYER)

ORCHESTIA GRANDICORNIS KROYER, 1845:292, PL. 1, FIGS. 2A-N.
NICEA LUCASII NICOLET, 1849:238, PL. 2, FIG. 7.
ALLORCHESTES VERTICILLATA DANA, 1852:205.
ALLORCHESTES PERUVIANA DANA, 1852:206.
ALLORCHESTES VERTICILLATA. DANA, 1853-55:886, PL. 60, FIGS. 2,3.
ALLORCHESTES VERTICILLATUS. BATE, 1862:43, PL. 7, FIG. 1.
NICEA NOVAE-ZEALANDIAE THOMSON, 1879A:235, PL. 10, FIG. B1.
NICEA NEO-ZELANICA. THOMSON AND CHILTON, 1886:144.
HYALE GRANDICORNIS. STEBBING, 1888:210.
HYALE NOVAE-ZEALANDIAE. STEBBING, 1888:500.
HYALE PREVOSTII. DELLA VALLE, 1893:519, (IN PART, PART =HYALE
HIRTIPALMA).
HYALE NOVAE-ZEALANDIAE. THOMSON, 1895:211.
HYALE GRANDICORNIS. STEBBING, 1906:566.
HYALE NOVAEZEALANDIAE. STEBBING, 1906:567.

HYALE NOVAE-ZEALANDIAE. CHILTON, 1909A:643.
HYALE GRANDICORNIS. CHILTON, 1912:508.
HYALE GRANDICORNIS. K.H.BARNARD, 1916:230.
HYALE GRANDICORNIS. SCHELLENBERG, 1935:227,233.
HYALE NOVAEZEALANDIAE. NICHOLLS, 1938:125, FIGS. 64D-F.
HYALE GRANDICORNIS. K.H.BARNARD, 1940:476,518, FIG. 34.
HYALE GRANDICORNIS. STEPHENSEN, 1949:33, FIGS. 14,15.
HYALE GRANDICORNIS. RUFFO, 1950:55.
HYALE GRANDICORNIS. MACNAE, 1953:1028.
HYALE GRANDICORNIS. K.H.BARNARD, 1955:93, FIG. 46.
HYALE GRANDICORNIS. HURLEY, 1957A:904,931, (KEY).
HYALE GRANDICORNIS FORMA NOVAEZEALANDIAE. HURLEY, 1957A:904, FIGS. 1-23, (KEY).
HYALE GRANDICORNIS. J.L.BARNARD, 1958B:81.
HYALE GRANDICORNIS. K.H.BARNARD, 1965:208.
HYALE GRANDICORNIS. J.L.BARNARD, 1970:254.
HYALE GRANDICORNIS. DAY, ET. AL., 1970:53.
HYALE GRANDICORNIS. J.L.BARNARD, 1972C:30,167, (KEY).
HYALE GRANDICORNIS. GRIFFITHS, 1973:299.
HYALE GRANDICORNIS. SANDERSON, 1973:27.
HYALE GRANDICORNIS. GRIFFITHS, 1974A:203.
HYALE GRANDICORNIS. GRIFFITHS, 1974B:254.
HYALE GRANDICORNIS. GRIFFITHS, 1974C:328.

DISTRIBUTION: ADELIE COAST: COMMONWEALTH BAY, 45 M (GEN).
MACQUARIE ISLAND: (GMT); AERIAL COVE, SHORE; NORTH END, BEACH (GEN).

DEPTH RANGE: SHORE-45 M.

EXTRINSIC DISTRIBUTION: CHILE; GOUGH ISLAND; HAWAII; NEW ZEALAND; SNARES ISLANDS; SOUTHERN AFRICA.

HYALE HIRTIPALMA (DANA)

ALLORCHESTES HIRTIPALMA DANA, 1852:205.
ALLORCHESTES HIRTIPALMA. DANA, 1853-55:888, PL. 60, FIG. 4.
ALLORCHESTES INCA BATE, 1862:40, PL. 6, FIG. 7.
HYALE VILLOSA SMITH, 1876:58.
HYALE VILLOSA. MIERS, 1879:206.
NICEA FIMBRIATA THOMSON, 1879A:236, PL. 10, FIG. B2.
NICEA FIMBRIATA. THOMSON AND CHILTON, 1886:144.
ALLORCHESTES GEORGIANUS PFEFFER, 1888:77, PL. 1, FIGS. 1A-N.
HYALE FIMBRIATA. STEBBING, 1888:500.
HYALE PREVOSTII. DELLA VALLE, 1893:519, (IN PART, PART =HYALE GRANDICORNIS).
HYALE FIMBRIATA. THOMSON, 1895:211.
HYALE HIRTIPALMA. STEBBING, 1906:564.
HYALE GEORGIANA. STEBBING, 1906:572.
HYALE VILLOSA. STEBBING, 1906:574.
HYALE TRIGONOCHIR WALKER, 1908:37, PL. 5, FIGS. 5-7.
HYALE HIRTIPALMA. CHILTON, 1909A:643.
HYALE HIRTIPALMA. CHILTON, 1913:55.
HYALE HIRTIPALMA. K.H.BARNARD, 1916:234.
HYALE HIRTIPALMA. SCHELLENBERG, 1926A:371.
HYALE HIRTIPALMA. STEPHENSEN, 1927:351.
HYALE HIRTIPALMA. SCHELLENBERG, 1931:226.
HYALE HIRTIPALMA. SCHELLENBERG, 1935:233.
HYALE HIRTIPALMA. NICHOLLS, 1938:124, FIGS. 64A-C.
HYALE HIRTIPALMA. STEPHENSEN, 1938:241,261.
HYALE HIRTIPALMA. STEPHENSEN, 1947:68.
HYALE HIRTIPALMA. STEPHENSEN, 1949:30, FIG. 13.
HYALE HIRTIPALMA. RUFFO, 1950:56,58.
HYALE HIRTIPALMA. HURLEY, 1957A:904,922, FIGS. 118-146, (KEY).
HYALE HIRTIPALMA. J.L.BARNARD, 1958B:81.
HYALE HIRTIPALMA. K.H.BARNARD, 1965:207.
HYALE HIRTIPALMA. DAY, ET. AL., 1970:53.
HYALE HIRTIPALMA. J.L.BARNARD, 1972C:30,167, (KEY).
HYALE HIRTIPALMA. SANDERSON, 1973:27.
HYALE HIRTIPALMA. BELLAN-SANTINI AND LEDOYER, 1974:701.
HYALE HIRTIPALMA. GRIFFITHS, 1974A:203.

DISTRIBUTION: ANTIPODES ISLANDS: (CC).
AUCKLAND ISLANDS: ENDERBY ISLAND (AOW), (CC); PORT ROSS, SHORE (KS).
CAMPBELL ISLAND: PERSEVERANCE HARBOUR (CC), SHORE (KS).
CROZET ISLANDS: SHIP COVE; POSSESSION ISLAND (KS), NAVIRE BAY; EAST ISLAND, ADVENTURE BAY (BS&L).
FALKLAND ISLANDS: PORT LOUIS, LOW TIDE (AS).
KERGUELEN ISLANDS: LOW TIDE (SIS), (EJM); OBSERVATORY BAY, LOW TIDE (AS); MORBIHAN BAY, LOW TIDE; LAROSE FJORD, LOW TIDE; MOULES ISLAND, LOW TIDE; PORT AUX FRANCAIS, LOW TIDE (BS&L).

MACQUARIE ISLAND: (GMT), (CC), LOW TIDE (GEN).
MAGELLANIC AREA: PUNTA ARENAS, LOW TIDE; BASKET ISLAND; PUERTO TORO, LOW TIDE; LENNOX ISLAND, LOW TIDE; USHUAIA BAY, LOW TIDE (AS).
SOUTH GEORGIA: LOW TIDE (GP); CUMBERLAND BAY, INTERTIDAL; OFF GRYTVIKEN (AS); ELSEHUL (KS).

DEPTH RANGE: LOW TIDE.

EXTRINSIC DISTRIBUTION: CHILE; GOUGH ISLAND; NEW ZEALAND; PERU; SOUTHERN AFRICA.

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INCERTAE SEDIS

DIDYMOCHELIA SPONGICOLA K.H.BARNARD

DIDYMOCHELIA SPONGICOLA K.H.BARNARD, 1931A:429.
DIDYMOCHELIA SPONGICOLA. K.H.BARNARD, 1932:248, FIG. 156.
DIDYMOCHEILA SPONGICOLA. J.L.BARNARD, 1958B:140.

DISTRIBUTION: SOUTH GEORGIA: CUMBERLAND EAST BAY, 88-273 M (KHB).

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BASED WHERE POSSIBLE ON THE UNITED
STATES BOARD ON GEOGRAPHIC NAMES (NO. 6, 1967;
NO. 14, 1969; NO. 103, 1968; NO. 111, 1969)

	LATI-TUDE	LONGI-TUDE
ACCESSIBLE BAY, (KERGUELEN ISLANDS)	49 08 S	70 11 E
ADELAIDE ISLAND	67 15 S	68 30 W
ADELIE COAST	67 00 S	139 00 E
ADMIRALTY BAY, (SOUTH SHETLAND ISLANDS)	62 10 S	58 25 W
ADVENTURE BAY, (CROZET ISLANDS)	-- -- -	--- -- -
AERIAL COVE, (MACQUARIE ISLAND)	-- -- -	--- -- -
ALASHEYEV BIGHT, (ENDERBY LAND)	67 30 S	45 40 E
ALEXANDER ISLAND	71 00 S	70 00 W
ALMIRANTAZGO SOUND, (MAGELLANIC AREA)	54 19 S	69 30 W
ANTARCTIC BAY, (SOUTH GEORGIA)	54 06 S	36 59 W
ANTIPODES ISLANDS	49 42 S	178 50 E
ANVERS ISLAND, (PALMER ARCHIPELAGO)	64 33 S	63 33 W
ARENAS POINT, (MAGELLANIC AREA)	53 09 S	70 55 W
ARGENTINE ISLANDS, (WILHELM ARCHIPELAGO)	65 15 S	64 16 W
ARTHUR HARBOUR, (PALMER ARCHIPELAGO)	64 46 S	64 04 W
ATLANTIC SECTOR, (SOUTHERN OCEAN)	70 W TO 20 E	
AUCKLAND ISLANDS	50 45 S	166 10 E
AUGUSTE ISLAND, (PALMER ARCHIPELAGO)	64 04 S	61 37 W
AUSTRALIA ISLAND, (KERGUELEN ISLANDS)	49 26 S	69 52 E
BACK BAY, (MARGUERITE BAY)	68 11 S	67 00 W
BAHIA INUTIL, (MAGELLANIC AREA)	53 23 S	69 17 W
BAHIA TUESDAY, (MAGELLANIC AREA)	52 50 S	74 27 W
BALIN POINT, (SOUTH ORKNEY ISLANDS)	60 42 S	45 36 W
BANNER COVE, (MAGELLANIC AREA)	55 01 S	66 56 W
BARFF POINT, (SOUTH GEORGIA)	54 14 S	36 24 W
BASKET ISLAND, (MAGELLANIC AREA)	54 44 S	71 35 W
BAUDISSIN SOUND, (KERGUELEN ISLANDS)	49 26 S	69 46 E
BAY OF ISLES, (SOUTH GEORGIA)	54 02 S	37 20 W
BAY OF WHALES, (ROSS SEA)	78 30 S	164 20 W
BEAGLE CHANNEL, (MAGELLANIC AREA)	54 53 S	68 10 W
BEAUFORT ISLAND, (ROSS SEA)	76 57 S	166 56 E
BELLINGSHAUSEN SEA	70 00 S	85 00 W
BENIGUET REEF, (KERGUELEN ISLANDS)	49 26 S	70 05 E
BERKELEY SOUND, (FALKLAND ISLANDS)	51 34 S	57 55 W
BERNTSEN POINT, (SOUTH ORKNEY ISLANDS)	60 43 S	45 36 W
BETSY COVE, (KERGUELEN ISLANDS)	49 08 S	70 11 E
BISCOE BAY, (PALMER ARCHIPELAGO)	64 48 S	63 50 W
BISMARCK STRAIT, (PALMER ARCHIPELAGO)	64 51 S	64 00 W
BOOTH ISLAND, (WILHELM ARCHIPELAGO)	65 05 S	64 00 W
BORGE BAY, (SOUTH ORKNEY ISLANDS)	60 43 S	45 37 W
BORJA BAY, (MAGELLANIC AREA)	53 32 S	72 29 W
BOSSIERE FJORD, (KERGUELEN ISLANDS)	49 25 S	69 41 E
BOUVET ISLAND	54 26 S	03 24 E
BRANSFIELD STRAIT	63 00 S	59 00 W
BRIDGEMAN ISLAND, (SOUTH SHETLAND ISLANDS)	62 04 S	56 44 W
BRIDGES ISLANDS, (MAGELLANIC AREA)	54 52 S	68 17 W
BRISTOL ISLAND, (SOUTH SANDWICH ISLANDS)	59 02 S	26 31 W
BROWNS BAY, (SOUTH ORKNEY ISLANDS)	60 43 S	44 36 W
BURDWOOD BANK	53 45 S	61 10 W
CAM ROCK, (SOUTH ORKNEY ISLANDS)	60 43 S	45 37 W
CAMPBELL ISLAND	52 32 S	169 10 E
CANDLEMAS ISLANDS, (SOUTH SANDWICH ISLANDS)	57 03 S	26 43 W
CAPE ADARE, (ROSS SEA)	71 17 S	170 14 E
CAPE ARMITAGE, (ROSS SEA)	77 51 S	166 40 E
CAPE BIENVENUE, (ADELIE COAST)	66 43 S	140 31 E
CAPE BLANCO, (MAGELLANIC AREA)	52 18 S	74 29 W
CAPE BOWLES, (SOUTH SHETLAND ISLANDS)	61 17 S	54 04 W
CAPE CROZIER, (ROSS SEA)	77 31 S	169 23 E
CAPE GEODESIE, (ADELIE COAST)	66 40 S	139 51 E
CAPE HORN, (MAGELLANIC AREA)	55 59 S	67 16 W
CAPE JULES, (ADELIE COAST)	66 44 S	140 55 E
CAPE LOLLO, (BOUVET ISLAND)	54 26 S	03 29 E
CAPE MACLEAR, (KERGUELEN ISLANDS)	-- -- -	--- -- -
CAPE PEMBROKE, (FALKLAND ISLANDS)	51 40 S	57 43 W
CAPE ROQUEMAUREL, (TRINITY PENINSULA)	63 33 S	58 56 W
CAPE ROYDS, (ROSS SEA)	77 33 S	166 09 E
CAPE SAUNDERS, (SOUTH GEORGIA)	54 07 S	36 38 W
CAPE TUXEN, (WILHELM ARCHIPELAGO)	65 16 S	64 08 W
CAPE VALDIVIA, (BOUVET ISLAND)	54 24 S	03 24 E
CAPE VALENTINA, (MAGELLANIC AREA)	52 54 S	74 19 W
CAPE VIRGENES, (MAGELLANIC AREA)	52 19 S	68 21 W
CAPE WADWORTH, (ROSS SEA)	73 19 S	169 47 E
CARENAGE CREEK, (FALKLAND ISLANDS)	-- -- -	--- -- -
CARNLEY HARBOUR, (AUCKLAND ISLANDS)	50 50 S	166 05 E

'CARTHAGE BAY', (WILHELM ARCHIPELAGO)	-- -- -	--- -- -
CHAT ISLAND, (KERGUELEN ISLANDS)	49 28 S	70 06 E
CHAVEZ ISLAND, (WILHELM ARCHIPELAGO)	65 38 S	64 32 W
CHRISTMAS HARBOUR, (KERGUELEN ISLANDS)	48 40 S	69 03 E
CLARENCE ISLAND, (SOUTH SHETLAND ISLANDS)	61 12 S	54 05 W
COAL HARBOUR, (SOUTH GEORGIA).	54 02 S	37 57 W
COATS LAND	77 00 S	28 00 W
COLERIDGE BAY, (AUCKLAND ISLANDS)	50 49 S	166 01 E
COMMONWEALTH BAY, (ADELIE COAST)	66 54 S	142 40 E
'CORAL BAY', (SOUTH GEORGIA)	-- -- -	--- -- -
COULMAN ISLAND, (ROSS SEA)	73 28 S	169 45 E
CROZET BASIN	39 00 S	60 00 E
CROZET ISLANDS.	42 25 S	51 23 E
CUMBERLAND BAY, (KERGUELEN ISLANDS)	48 50 S	69 00 E
CUMBERLAND BAY, (SOUTH GEORGIA)	54 14 S	36 28 W
CUMBERLAND EAST BAY, (SOUTH GEORGIA)	54 17 S	36 26 W
CUMBERLAND WEST BAY, (SOUTH GEORGIA)	54 14 S	36 35 W
DANCO COAST	64 42 S	62 00 W
DARTMOUTH POINT, (SOUTH GEORGIA)	54 18 S	36 27 W
DAVIS SEA.	66 00 S	92 00 E
DECEPTION ISLAND, (SOUTH SHETLAND ISLANDS)	62 57 S	60 38 W
DESOLACION ISLA, (MAGELLANIC AREA).	52 50 S	74 27 W
DION ISLANDS, (MARGUERITE BAY)	67 52 S	68 43 W
'DISCOVERY INLET', (ROSS SEA).	78 30 S	170 00 E
DOVE CHANNEL, (SOUTH ORKNEY ISLANDS)	60 45 S	45 36 W
DRAKE PASSAGE	60 00 S	65 00 W
DRYGALSKI FJORD, (SOUTH GEORGIA)	54 49 S	36 00 W
DUKE OF YORK ISLAND, (ROSS SEA)	71 37 S	170 04 E
DUNGENESS POINT, (MAGELLANIC AREA).	52 23 S	68 25 W
'EAST BASE', (PALMER ARCHIPELAGO)	-- -- -	--- -- -
EAST FALKLAND ISLAND, (FALKLAND ISLANDS)	51 50 S	59 00 W
EAST ISLAND, (CROZET ISLANDS).	-- -- -	--- -- -
EAST SCOTIA BASIN	57 00 S	35 00 W
EDDYSTONE ROCK, (FALKLAND ISLANDS).	51 11 S	59 03 W
ELEPHANT FLATS, (SOUTH ORKNEY ISLANDS)	60 43 S	45 37 W
ELEPHANT ISLAND, (SOUTH SHETLAND ISLANDS)	61 10 S	55 14 W
ELIZABETH ISLAND, (MAGELLANIC AREA)	54 07 S	73 11 W
ELSEHUL, (SOUTH GEORGIA).	54 01 S	37 59 W
ENDERBY ISLAND, (AUCKLAND ISLANDS).	50 30 S	166 18 E
ENDERBY LAND	67 30 S	53 00 E
EWING ISLAND, (AUCKLAND ISLANDS)	50 32 S	166 19 E
FACTORY COVE, (SOUTH ORKNEY ISLANDS)	60 43 S	45 37 W
FALKLAND ISLANDS	51 50 S	59 30 W
FIGURE OF EIGHT ISLAND, (AUCKLAND ISLANDS)	50 46 S	166 02 E
FITZROY CHANNEL, (MAGELLANIC AREA).	52 42 S	71 25 W
'FLAGON POINT', (ROSS SEA)	-- -- -	--- -- -
FLANDRES BAY, (PALMER ARCHIPELAGO).	65 02 S	63 20 W
FORTESCUE BAY, (MAGELLANIC AREA)	53 42 S	72 00 W
FOURNIER BAY, (PALMER ARCHIPELAGO).	64 31 S	63 06 W
FRANKLIN ISLAND, (ROSS SEA)	76 05 S	168 11 E
FRENCH PASSAGE, (PALMER ARCHIPELAGO)	65 10 S	64 20 W
GALINDEZ ISLAND, (WILHELM ARCHIPELAGO)	65 15 S	64 15 W
GAND ISLAND, (PALMER ARCHIPELAGO)	64 24 S	62 51 W
GARDEN BAY, (MACQUARIE ISLAND)	-- -- -	--- -- -
'GAUSS STATION', (DAVIS SEA)	66 S	89 E
GAUSSBERG, (DAVIS SEA)	66 48 S	89 12 E
GAZELLE HARBOUR, (KERGUELEN ISLANDS)	49 18 S	69 40 E
GEOLOGIE ARCHIPELAGO, (ADELIE COAST)	66 39 S	139 55 E
GENTE GRANDE BAY, (MAGELLANIC AREA)	52 57 S	70 13 W
GERLACHE STRAIT, (PALMER ARCHIPELAGO)	64 30 S	62 20 W
GODTHUL BAY, (SOUTH GEORGIA)	54 17 S	36 18 W
GOOD SUCCESS BAY, (MAGELLANIC AREA)	54 56 S	65 22 W
GOUDIER ISLAND, (PALMER ARCHIPELAGO)	64 50 S	63 30 W
'GRAHAM REGION', (PALMER ARCHIPELAGO)	-- -- -	--- -- -
GREENLAND HARBOUR, (KERGUELEN ISLANDS)	49 36 S	70 12 E
GREENPATCH, (FALKLAND ISLANDS).	-- -- -	--- -- -
GRUNDEN ROCK, (TRINITY PENINSULA)	63 24 S	56 58 W
GRYTVIKEN, (SOUTH GEORGIA)	54 17 S	36 31 W
HARRIS BAY, (MAGELLANIC AREA).	53 50 S	70 26 W
HASSELBROUGH BAY, (MACQUARIE ISLAND)	54 28 S	158 58 E
HASWELL ISLANDS, (DAVIS SEA)	66 32 S	92 59 E
HEARD ISLAND	53 06 S	73 30 E
HERMITE ISLAND, (MAGELLANIC AREA)	55 50 S	67 40 W
HOPE BAY, (TRINITY PENINSULA).	63 23 S	57 00 W
HORSESHOE ISLAND, (PALMER ARCHIPELAGO)	67 51 S	67 12 W
HOSEASON ISLAND, (PALMER ARCHIPELAGO)	63 44 S	61 41 W
HOSKYN ISLAND, (KERGUELEN ISLANDS).	49 24 S	70 02 E
HOUND BAY, (SOUTH GEORGIA)	54 22 S	36 13 W
HOVGAARD ISLAND, (WILHELM ARCHIPELAGO)	65 08 S	64 08 W
HUSVIK, (SOUTH GEORGIA)	54 10 S	36 43 W
HUT COVE, (TRINITY PENINSULA).	63 24 S	56 59 W
HUT POINT, (ROSS SEA)	77 51 S	166 38 E
'HYSTADHULLET', (SOUTH GEORGIA)	54 16 S	36 18 W

INDIAN SECTOR, (SOUTHERN OCEAN)	20 E TO 120 E
ISTHMUS BAY, (MAGELLANIC AREA)	52 11 S 73 39 W
JAGGED ROCKS, (TRINITY PENINSULA)	63 24 S 56 59 W
JAMES ROSS ISLAND, (TRINITY PENINSULA)	64 15 S 57 45 W
JASON HARBOUR, (SOUTH GEORGIA)	54 11 S 36 35 W
'JASON LIGHT', (SOUTH GEORGIA)	54 10 S 36 30 W
JENNY ISLAND, (MARGUERITE BAY)	64 44 S 68 25 W
JOINVILLE ISLAND, (TRINITY PENINSULA)	63 15 S 55 45 W
JOLIETTE COVE, (KERGUELEN ISLANDS).	49 26 S 69 54 E
KARL LUYKEN SOUND, (KERGUELEN ISLANDS)	49 22 S 69 57 E
'KATANUSHUAIA', (MAGELLANIC AREA)	-- -- - --- -- -
KERGUELEN ISLANDS	49 00 S 70 00 E
KING EDWARD COVE, (SOUTH GEORGIA)	54 17 S 36 30 W
KING GEORGE BAY, (SOUTH SHETLAND ISLANDS)	62 06 S 58 05 W
KING GEORGE ISLAND, (SOUTH SHETLAND ISLANDS).	62 00 S 58 15 W
LABOUREUR SOUND, (KERGUELEN ISLANDS)	49 26 S 69 52 E
'LAGOTOWIA', (MAGELLANIC AREA)	-- -- - --- -- -
LAPATAIA, (MAGELLANIC AREA)	54 50 S 68 34 W
LARGA ISLAND, (MAGELLANIC AREA)	53 26 S 73 16 W
LAROSE FJORD, (KERGUELEN ISLANDS)	-- -- - --- -- -
LARSEN HARBOUR, (SOUTH GEORGIA)	54 50 S 36 01 W
LAURIE HARBOUR, (AUCKLAND ISLANDS).	50 33 S 166 12 E
LAURIE ISLAND, (SOUTH ORKNEY ISLANDS)	60 44 S 44 37 W
LECUYER POINT, (PALMER ARCHIPELAGO)	64 50 S 63 30 W
LEITH HARBOUR, (SOUTH GEORGIA)	54 08 S 36 41 W
LEMAIRE CHANNEL, (WILHELM ARCHIPELAGO)	65 04 S 63 57 W
LENNOX COVE, (MAGELLANIC AREA)	55 17 S 66 51 W
LENNOX ISLAND, (MAGELLANIC AREA)	55 16 S 66 57 W
LIVELY ISLAND, (FALKLAND ISLANDS)	-- -- - --- -- -
LIVINGSTON ISLAND, (SOUTH SHETLAND ISLANDS)	62 36 S 60 30 W
LONDONDERRY ISLAND, (MAGELLANIC AREA)	55 03 S 70 35 W
MACDOUGAL BAY, (SOUTH ORKNEY ISLANDS)	60 42 S 44 33 W
MACQUARIE ISLAND	54 29 S 158 58 E
MAGELLANIC AREA	50 00 S 70 00 W
MAGELLAN SOUND, (MAGELLANIC AREA)	54 29 S 70 56 W
MARGUERITE BAY.	68 30 S 68 30 W
MAIVIKEN, (SOUTH GEORGIA)	54 14 S 36 30 W
MARION ISLAND, (PRINCE EDWARD ISLANDS)	46 53 S 37 45 E
'MARTHA BANK', (MAGELLANIC AREA)	-- -- - --- -- -
MASKED ISLAND, (AUCKLAND ISLANDS)	50 50 S 166 02 W
MCMURDO SOUND, (ROSS SEA)	77 30 S 165 00 E
MELCHIOR ISLANDS, (PALMER ARCHIPELAGO)	64 19 S 62 57 W
MELCHIOR HARBOUR, (PALMER ARCHIPELAGO)	64 19 S 62 59 W
'MIRNY STATION', (DAVIS SEA)	-- -- - --- -- -
MORAINE FJORD, (SOUTH GEORGIA)	54 19 S 36 29 W
MORBIHAN BAY, (KERGUELEN ISLANDS)	49 26 S 70 08 E
MOULES ISLAND, (KERGUELEN ISLANDS).	49 24 S 69 57 E
MUSGRAVE HARBOUR, (AUCKLAND ISLANDS)	50 47 S 166 00 E
NAVARINO ISLAND, (MAGELLANIC AREA).	55 05 S 67 40 W
NAVIRE BAY, (CROZET ISLANDS)	-- -- - --- -- -
NENY FJORD, (PALMER ARCHIPELAGO)	68 16 S 66 50 W
NEUMAYER CHANNEL, (PALMER ARCHIPELAGO)	64 47 S 63 30 W
NORMANNA STRAIT, (SOUTH ORKNEY ISLANDS)	60 40 S 45 38 W
NORTH END, (MACQUARIE ISLAND).	54 28 S 158 58 E
NORTH ISLAND, (FALKLAND ISLANDS), SEE TRAP ISLAND.	52 01 S 59 08 W
NUEVA ISLAND, (MAGELLANIC AREA)	55 14 S 66 33 W
OATES COAST	70 00 S 160 00 E
OBSERVATORY BAY, (KERGUELEN ISLANDS)	49 25 S 69 54 E
OCEAN HARBOUR, (SOUTH GEORGIA)	54 20 S 36 16 W
OTTER ISLANDS, (MAGELLANIC AREA)	52 22 S 73 40 W
PAAL HARBOUR, (SOUTH ORKNEY ISLANDS)	60 43 S 45 36 W
PACIFIC SECTOR, (SOUTHERN OCEAN)	120 E TO 70 W
PALMER ARCHIPELAGO	64 10 S 62 00 W
PARAMO, (MAGELLANIC AREA)	53 01 S 68 16 W
PAULET ISLAND, (TRINITY PENINSULA).	63 35 S 55 47 W
PELTIER CHANNEL, (PALMER ARCHIPELAGO)	64 52 S 63 32 W
PENDER ISLAND, (KERGUELEN ISLANDS).	49 24 S 70 01 E
PENDULUM COVE, (SOUTH SHETLAND ISLANDS).	62 56 S 60 36 W
PERSEVERANCE HARBOUR, (CAMPBELL ISLAND).	52 34 S 169 12 E
PETER I ISLAND.	68 47 S 90 35 W
PETERMANN ISLAND, (WILHELM ARCHIPELAGO).	65 10 S 64 10 W
PICTON ISLAND, (MAGELLANIC AREA)	55 02 S 66 57 W
POINT MOLLOY, (KERGUELEN ISLANDS)	49 21 S 70 05 E
PORT ALBEMARLE, (FALKLAND ISLANDS).	52 11 S 60 25 W
PORT AUX FRANCAIS, (KERGUELEN ISLANDS)	49 20 S 70 14 E
PORT BIZET, (KERGUELEN ISLANDS)	49 31 S 69 54 E
PORT CHARCOT, (WILHELM ARCHIPELAGO)	65 04 S 64 00 W
PORT CIRCUMCISION, (WILHELM ARCHIPELAGO)	65 11 S 64 10 W
PORT DOUZIEME, (KERGUELEN ISLANDS).	49 31 S 70 10 E
PORT FOSTER, (SOUTH SHETLAND ISLANDS)	62 57 S 60 39 W
PORT JEANNE-D'ARC, (KERGUELEN ISLANDS)	49 33 S 69 48 E
PORT LOCKROY, (PALMER ARCHIPELAGO).	64 49 S 63 30 W
PORT LOUIS, (FALKLAND ISLANDS)	51 33 S 58 07 W

PORT ROSS, (AUCKLAND ISLANDS).	50 31 S	166 17 E
PORT STANLEY, (FALKLAND ISLANDS)	51 41 S	57 51 W
PORT WILLIAM, (FALKLAND ISLANDS)	51 40 S	57 48 W
PORVENIR, (MAGELLANIC AREA)	53 18 S	70 22 W
POSESION BAY, (MAGELLANIC AREA)	52 17 S	69 14 W
POSSESSION BAY, (SOUTH GEORGIA)	54 06 S	37 07 W
POSSESSION ISLAND, (CROZET ISLANDS)	42 25 S	51 43 E
PRINCE EDWARD ISLANDS	46 45 S	37 50 E
PUERTO ANGOSTO, (MAGELLANIC AREA)	53 13 S	73 22 W
'PUERTO BRIDGES', (MAGELLANIC AREA), SEE BRIDGES ISLAND	54 52 S	68 17 W
PUERTO BUENO, (MAGELLANIC AREA)	50 59 S	74 13 W
PUERTO CHURRUCA, (MAGELLANIC AREA).	53 02 S	73 56 W
PUERTO CONDOR, (MAGELLANIC AREA)	53 21 S	72 39 W
PUERTO COOKE, (MAGELLANIC AREA)	54 17 S	69 59 W
PUERTO DEL HAMBRE, (MAGELLANIC AREA)	53 38 S	70 56 W
PUERTO EUGENIA, (MAGELLANIC AREA)	54 55 S	67 18 W
'PUERTO GALLEGOS', (MAGELLANIC AREA), SEE RIO GALLEGOS.	51 38 S	65 13 W
PUERTO HARBERTON, (MAGELLANIC AREA)	54 53 S	67 20 W
PUERTO HOPE, (MAGELLANIC AREA)	54 08 S	70 59 W
'PUERTO LAGUNA', (MAGELLANIC AREA).	-- -- -	--- -- -
PUERTO PANTALON, (MAGELLANIC AREA).	54 54 S	67 56 W
PUERTO TORO, (MAGELLANIC AREA)	55 04 S	67 04 W
PUNTA ARENAS, (MAGELLANIC AREA)	53 09 S	70 55 W
PUNTA TANDY, (MAGELLANIC AREA)	52 15 S	69 19 W
QUEEN MARY COAST	67 00 S	96 00 E
RANVIKA, (PETER I ISLAND)	68 44 S	90 30 E
RAPID POINT, (FALKLAND ISLANDS)	51 24 S	60 01 W
RASMUSSEN ISLAND, (WILHELM ARCHIPELAGO).	65 15 S	64 05 W
RHODES BAY, (KERGUELEN ISLANDS)	49 00 S	69 20 E
RIO GALLEGOS, (MAGELLANIC AREA)	51 38 S	69 13 W
RIO SECO, (MAGELLANIC AREA)	53 04 S	70 52 W
ROSS ICE SHELF, (ROSS SEA)	81 30 S	175 00 W
ROSS SEA	76 00 S	175 00 E
ROY COVE, (FALKLAND ISLANDS)	51 34 S	60 24 W
ROYAL SOUND, (KERGUELEN ISLANDS)	49 30 S	70 20 E
SACRAMENTO BIGHT, (SOUTH GEORGIA)	54 29 S	36 01 W
SAINT ANDREWS BAY, (SOUTH GEORGIA).	54 26 S	36 11 W
SAN NICOLAS BAY, (MAGELLANIC AREA).	53 50 S	71 06 W
SANTA ANA POINT, (MAGELLANIC AREA).	53 38 S	70 55 W
SANTA CRUZ, (MAGELLANIC AREA).	53 18 S	72 07 W
SARMIENTO BANK, (MAGELLANIC AREA)	54 24 S	68 09 W
SAUNDERS ISLAND, (SOUTH SANDWICH ISLANDS)	57 47 S	26 27 W
SCHOLLAERT CHANNEL, (PALMER ARCHIPELAGO)	64 30 S	62 50 W
SCOTIA BAY, (SOUTH ORKNEY ISLANDS).	60 46 S	44 40 W
SEYMOUR ISLAND, (TRINITY PENINSULA)	64 17 S	56 45 W
SHACKLETON GLACIER, (QUEEN MARY COAST)	66 18 S	54 58 E
SHAG ROCKS	53 33 S	42 02 W
SHALLOW BAY, (FALKLAND ISLANDS)	51 24 S	59 59 W
SHELTER ISLANDS, (WILHELM ARCHIPELAGO)	65 15 S	64 17 W
SHIP COVE, (CROZET ISLANDS)	-- -- -	--- -- -
SIGNY ISLAND, (SOUTH ORKNEY ISLANDS)	60 43 S	45 38 W
SIMON BAY, (MAGELLANIC AREA)	53 53 S	72 02 W
SKUA ISLAND, (WILHELM ARCHIPELAGO).	65 15 S	64 16 W
SMYTH CHANNEL, (MAGELLANIC AREA)	52 15 S	73 40 W
SNOW HILL ISLAND, (TRINITY PENINSULA)	64 28 S	57 12 W
SOUTH EAST HARBOUR, (MACQUARIE ISLAND)	54 47 S	158 52 E
SOUTHERN OCEAN.	SOUTH OF 50 S	
SOUTH GEORGIA	54 15 S	36 45 W
SOUTH ORKNEY ISLANDS	60 35 S	45 30 W
SOUTH SANDWICH ISLANDS	56 00 S	26 30 W
SOUTH SHETLAND ISLANDS	62 00 S	58 00 W
SPARROW COVE, (FALKLAND ISLANDS)	51 39 S	57 48 W
SPRING POINT, (DANCO COAST)	64 18 S	61 03 W
STATEN ISLAND, (MAGELLANIC AREA)	54 47 S	64 15 W
STEWART BAY, (MAGELLANIC AREA)	54 55 S	71 26 W
STONINGTON ISLAND, (MARGUERITE BAY)	68 11 S	67 00 W
STROMNESS HARBOUR, (SOUTH GEORGIA)	54 09 S	36 41 W
STRAIT OF MAGELLAN, (MAGELLANIC AREA)	54 00 S	71 00 W
'SUDFJORD', (SOUTH GEORGIA)	-- -- -	--- -- -
SUHM ISLAND, (KERGUELEN ISLANDS)	49 30 S	70 10 E
SWAINS BAY, (KERGUELEN ISLANDS)	49 35 S	69 42 E
TENT ISLAND, (ROSS SEA)	77 41 S	166 22 E
TERROR COVE, (AUCKLAND ISLANDS)	50 32 S	166 13 E
THALA HILLS, (ENDERBY LAND)	67 40 S	46 00 E
THREE ISLAND HARBOUR, (KERGUELEN ISLANDS)	49 27 S	70 05 E
TIERRA DEL FUEGO, (MAGELLANIC AREA).	54 00 S	70 00 W
TRAP ISLAND, (FALKLAND ISLANDS)	52 01 S	59 08 W
TREPASSEY ISLAND, (MARGUERITE BAY).	68 12 S	66 59 W
TRIBUNA BANK, (MAGELLANIC AREA)	52 38 S	70 07 W
TRINITY PENINSULA	63 30 S	58 00 W
TWO HUMMOCK ISLAND, (PALMER ARCHIPELAGO)	64 08 S	61 42 W
ULTIMA ESPERANZA, (MAGELLANIC AREA)	51 34 S	72 45 W
UNDINE HARBOUR, (SOUTH GEORGIA)	54 02 S	37 58 W
USHUAIA BAY, (MAGELLANIC AREA)	54 49 S	68 16 W

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